

Acquired Brain Injury Partnership Project

2013-15 Program Review

September 2015

The ABI Partnership Project



...A joint initiative of...



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EXECUTIVE SUMMARY

The Acquired Brain Injury (ABI) Partnership Project (the Partnership) service model continues to be one of exemplary practice. Over twenty years, through a broad range of services offered across the province, a solid infrastructure of ABI support has been established.

In this review period (2013-14 and 2014-15), SGI committed an average of \$5.2 million annually and funded agencies supplemented this by an average of \$3.8 million annually through their in-kind contributions showing their shared commitment to ABI programming.

The Partnership continues to demonstrate the valuable services it offers to individuals with ABI and their families. Across all Partnership programs in this review period, there was an annual average of:

- 1,088 clients served
- 328 new clients registered
- over 61,000 service hours to registered clients and
- over 2,000 consultations

Benefits accrue to ABI survivors and their families through long standing partnerships both between Partnership funded agencies and with other services. This is illustrated by **4,142 consultations (average of 2,071 per year) to assist other service providers in meeting the needs of individuals with brain injuries**, including 911 referrals made during them (average of 456 per year). In addition, 952 referrals were made (average of 476 per year) by case management programs to a wide variety of programs this review period.

ABI survivors have a wide range of service needs and our two client outcome measures show successful outcomes in functional maintenance and improvement and goal achievement. The Mayo-Portland Adaptability Inventory ratings showed significant improvements on all subscales (ability, adjustment, and participation), with the average severity classification on the *Adjustment subscale* and *Total score* based on the inventories' normed data reducing from "Mild to Moderate Limitations" to "Mild Limitations". This indicates clinical as well as statistically significant improvements. There were high levels of goal achievement with 89% of goals for discharged clients

being fully to partially achieved. Goal achievement was particularly high for service navigation goals.

Since the Partnership's inception 20 years ago our service mandate has included family support. Families most often play a central and vital role in caring for their loved ones with ABI and the Partnership was ahead of its time in recognizing the important voice of family and in incorporating support for them into our service continuum. Family support services will continue to be offered and we will continue to profile this important work to ensure the unique needs of families/natural supporters are addressed.

Key elements of our current practice (e.g., case management/service navigation, psychosocial support) have been documented in the literature as important components of effective service delivery for meeting the diverse needs of brain injury survivors, lending support for maintaining our current practice in these areas. This supports the Partnership's continued investment in these areas, as case management comprises 49% of our funding and 55% of clients in 2014-15 (611 clients) utilize these services.



Provided a great deal of support and guidance to the client and family in the difficult time of adjustment following a traumatic brain injury. The task of returning to real life responsibilities when dealing with an "invisible" disability can be very daunting for everyone involved, the outreach team has an important role in supporting and advocating for those clients.

ABI Outreach Team Service Partner



Site-level evaluations reveal that clients and their families are largely satisfied with the services they receive across our service continuum. They have felt understood and supported in establishing goals to address their needs. Feedback received through the site-level evaluations also revealed opportunities for improvement and funded agencies will continue in their efforts to make program improvements.

Gaps in services still persist in some areas for individuals with ABI (most notably residential support services) and the Partnership has been proactive in giving voice to these service challenges in two separate submissions to large-scale government

initiatives – the Disability Strategy and the Mental Health and Addictions Action Plan. The ABI Provincial Office will continue to bring the ABI voice to these initiatives as implementation of them gets underway in hopes to see service benefits to ABI survivors.

In addition to the Partnership's work in direct client service, substantial investment has also been made through the Partnership in education and prevention activity. Education about brain injury and the prevention of it, to further the understanding of the public, has been a key role of our education and prevention programs.

Through our programs' efforts, over 18,000 hours of education and prevention service was recorded – with almost 28,000 attendees at Education and Prevention Events (which excludes program preparation, coordination, and community development).

Injuries do not affect only the injured; they affect families, jobs, income, school attendance and the general economy of the province. The ABI Partnership has supported injury prevention from the beginning with dedicated dollars going toward resources, programs and communities. The only cure for a brain injury is prevention.

Specific recommendations that resulted from this review process will guide our activities in the following areas: Education and Prevention, Staff Training, Promotion, Acquired Brain Injury Information System, Client Outcome Tools, Family Support, and ABI Voice in Intersectoral Initiatives.

INTRODUCTION

Acquired Brain injury (ABI), particularly of the traumatic brain injury (TBI) type, is one of the leading causes of death and lifelong disability worldwide [1].

With advances in medical technology and emergency response, the brain injury survival rate has dramatically increased. Because of the complex physical, cognitive, psychological and psychosocial impairments that often result, many individuals who sustain serious brain injuries require service and support for many years – some for the remainder of their lives [2-4].

History

In 1995 SGI changed its procedures for compensating their insurance policy holders who had been injured in a motor vehicle collision. Policy holders were no longer eligible to claim for pain and suffering, but were compensated for accident expenses, income replacement and had greater rehabilitation benefits. This change in service and compensation was the introduction to SGI's No Fault Insurance and in conjunction with that, the development of the Acquired Brain Injury (ABI) Partnership Project (hereafter referred to as "the Partnership").

The unique partnership established by SGI and the Ministry of Health set out to build "a comprehensive, integrated system of supports, resources and services that will enhance the rehabilitation outcomes and improve the quality of life for individuals with acquired brain injuries and their families" [5]. A framework for services was recommended by SGI's Rehabilitation Advisory Board and the ABI Working Group. The Partnership was intended to address the following identified gaps in service: service coordination to facilitate survivors' access to required services; life skills programming; options for avocational, vocational, social, recreational and leisure activities; residential service options; supportive services for families; education and training on brain injuries; and prevention activities to reduce the prevalence of traumatic and other brain injuries [5].

In January 1996, the Partnership commenced as a three-year pilot project, with SGI committing \$9.3 million over three years from 1996 to 1998. The Ministry of Health committed to providing ongoing project management and coordination of the

Partnership. Additionally, a Provincial Advisory Group was formed in an effort to provide continual consultation and advice regarding Partnership activities. Since the pilot phase, SGI has renewed funding to the Partnership in five subsequent contracts.

The funded agencies encompassed under the Partnership are evaluated annually in an effort to ensure that the needs of ABI clients continue to be met. Data from these annual evaluations are rolled-up each contract period into an aggregate ABI Partnership Project evaluation report [6-10]. As a result of these evaluation activities, some funded agencies have maintained funding levels, some new programs have been developed to address evaluation recommendations, while other agencies have received enhanced funding in order to meet the unique needs of ABI clients. Table 1 summarizes the evaluations completed to date, as well as the changes made after each evaluation.

Table 1: ABI Partnership Project Evaluations over the last six contract periods

Contract Period	Evaluation Focus	Program Changes as a result of Evaluation
1996-1998	The initial evaluation of the ABI Partnership Project was a process evaluation – an assessment of whether the Partnership was implemented as planned. Results of this process evaluation indicated that clients and families: 1) reported high satisfaction; 2) identified more available supports; and 3) found programs to be responsive to their needs. It was concluded that coordination of services had improved, but there was a need for increased coordination of education and prevention efforts. In addition, three gaps were identified by clients, families, and staff: residential supports, resources for addiction and substance abuse, and life enrichment options.	\$1.25M was approved to support program expansion to address Residential Support and Life Enrichment Options. Funding was approved through a Call for Proposal process. The Acquired Brain Injury Information System (ABIIS) was implemented in January 2000. Regional Coordination was enhanced in the Central Region. Dedicated regional Education and Prevention coordination resources were established.

1999-2003	<p>This second evaluation focused on programs individually (site level evaluations) as well as program and client outcomes. Results suggested that the original intent of Partnership was ‘on track’ and a literature review revealed the service model was in line with best practice. A cost-benefit analysis indicated a “break even” scenario for SGI. Additionally, clients maintained their level of quality of life and community integration, and increased their awareness of ABI prevention and knowledge of ABI. A family needs assessment was recommended.</p>	<p>The ABIIS was upgraded to allow the generation of pre-formatted reports on client demographics and service information. In 2006, the Goal Attainment Template and the fourth edition of the Mayo-Portland Adaptability Inventory were chosen as the two provincial outcome measures. In addition, reporting templates (statistical, financial, and outcome) were chosen to make reporting less labour intensive. Local responses to identified needs for support groups and networks were met by local service providers on an ad hoc basis including both self/mutual-help and professionally-facilitated formats.</p>
2004-2006	<p>The third evaluation focused on client outcomes and family needs. It was concluded that clients showed either maintenance or improvement on abilities and/or status as measured by assessments used, fully achieved 62% of their program goals and partially achieved another 29%, and that clients maintained their functional status.</p> <p>Very high satisfaction was shown for Education and Prevention programming.</p> <p>The referrals suggested that system navigation was occurring and that community partners were satisfied with the Partnership programs’ services.</p> <p>It was recommended that the Partnership increase public relations (PR), and improve its services to families.</p>	<p>Regarding family needs: the ABIIS was upgraded to allow tracking of consultation (to families and others) and family service; a special educational session for family was held with Jeffrey Kreutzer in 2006; many funded agencies indicated involving families on an ad hoc basis and/or facilitating support groups in which family members were welcome; SBIA events continued to provide family education and support through their annual events.</p> <p>Regarding public relations: Pamphlets were (and continue to be) updated, a communication plan for upcoming events was established, and other public relation activities continued to be explored.</p> <p>Other changes: Admission criteria was added to service contracts; Funded agencies providing education and injury prevention activities were encouraged to utilize a community develop approach to service</p>

		delivery to offset the time devoted to PARTY programming.
2007-2010	<p>This fourth program evaluation, re-titled a program review, focused on service statistics and client outcome measures in use provincially. Evaluation results continued to be positive, with significant improvements noted between intake and anniversary MPAI-4 administrations, a high percentage of goals partially or fully achieved and referral patterns suggesting a strong link with other health and human services.</p> <p>Recommendations included improving the ABIIS, engaging in research activities, monitoring and reporting on service gaps and barriers for clients and families, improving communication within the Partnership, placing more of the injury prevention focus on community development rather than service provision, and continuing to advance the injury prevention agenda through provincial/national tables.</p>	<p>ABI Program Guidelines were distributed to funded agencies in February 2007. Updates were made to the ABIIS system and manual, three external research teams were contracted to evaluate different aspects of the Partnership (see description of 2010-13 evaluation), and funded agencies providing education and injury prevention activities were encouraged to utilize a community develop approach to service delivery.</p> <p>Based on 2004-06 recommendations: An ABI Partnership website was launched in 2010, www.abipartnership.sk.ca, and family needs/activities continued to be monitored.</p>
2010-2013	<p>The fifth program review had the same structure as the 2007-2010 review with the same results (significant improvement on MPAI-4, high goal achievement, high levels of service coordination shown through ABIIS service statistics), and also included results and recommendations from three external evaluations: 1) Laurence Thompson Strategic Consulting concluded funded programs were based on current best practice knowledge. Clients and families were generally very positive about their relationship with service providers, and service availability was found to be good in Regina, Saskatoon and Prince Albert but less available in rural areas. Clients were found to be successful in participating in services provided they had a</p>	See Update on 2010 – 2012 Evaluation Recommendations, page 111

	<p>good rapport with service providers (family support also assists in supporting this participation). Recommendations included enhancing client outcome data, targeting training options available to staff and increasing education and awareness of ABI services in Saskatchewan [11]; 2) R.A. Malatest & Associates estimated from survey and case file review results that over 1/3 of clients (38%) would be classified as complex cases who often have compounding issues above and beyond their ABI. According to a number of service providers, complex clients are 20% of a client caseload but take up 80% of the practitioner's service time. Seven service delivery tools were suggested to better meet the needs of a complex clientele: 1) good collaboration among all those involved in rehabilitation; 2) an internship or mentorship program for new service providers; 3) information sharing on a large scale throughout the Partnership; 4) follow-through with client referrals; 5) proactive case management; 6) motivational interviewing techniques; and 7) culturally safe practices to better serve Aboriginal clients [12]; and 3) British Columbia Injury Research and Prevention Unit (BCIRPU) found strong evidence in the literature to support child passenger safety education in combination with either incentive/distribution programs or enforcement campaigns, and concluded Saskatchewan's model is associated with a decreased number of unrestrained children. A return on investment was estimated ranging from \$12 to \$16 of costs avoided for every \$1 invested in child passenger safety. Numerous recommendations were made in the areas of education; equipment incentive/distribution; and enforcement/enactment [13].</p>	
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Current Contract 2013-2016	<p>The current report will provide a provincial summary of service and client outcome information. It will also provide some information on each of the individual program evaluations completed by funded agencies.</p>	<p>See 2013 – 2015 Evaluation Recommendations, page 116</p>
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The information that follows is the evaluation of the Partnership over the 2013-16 contract period, and summarizes service and outcome information from the 2013-14 and 2014-15 fiscal years.

Current State

Overview

The ABI Provincial Office located at the Community Care Branch at the Saskatchewan Ministry of Health provides overall project management of the ABI Partnership. Responsibilities include contract management of tripartite agreements including program monitoring, reporting on service utilization trends, issues management, policy development, and ensuring reporting compliance of funded agencies. The ABI Provincial Office formally reports on these activities to the project funder, SGI and three times a year to the ABI Provincial Advisory Group. It is also responsible to organize professional development opportunities to funded agencies and does so through the annual delivery of the Brain Trust conference as well as through regional in-services. The Provincial Office also maintains the ABI Partnership website, and provides ABIIS and program evaluation support to funded agencies on an ongoing basis.

Funding is provided to 36 community-based programs (19 delivered by non-profit organizations and 17 delivered by health regions), including three multidisciplinary outreach teams responsible for three broad geographic service areas, and six education and prevention programs. These programs are located throughout the province and provide a range of services to individuals with ABI, their families, and communities.

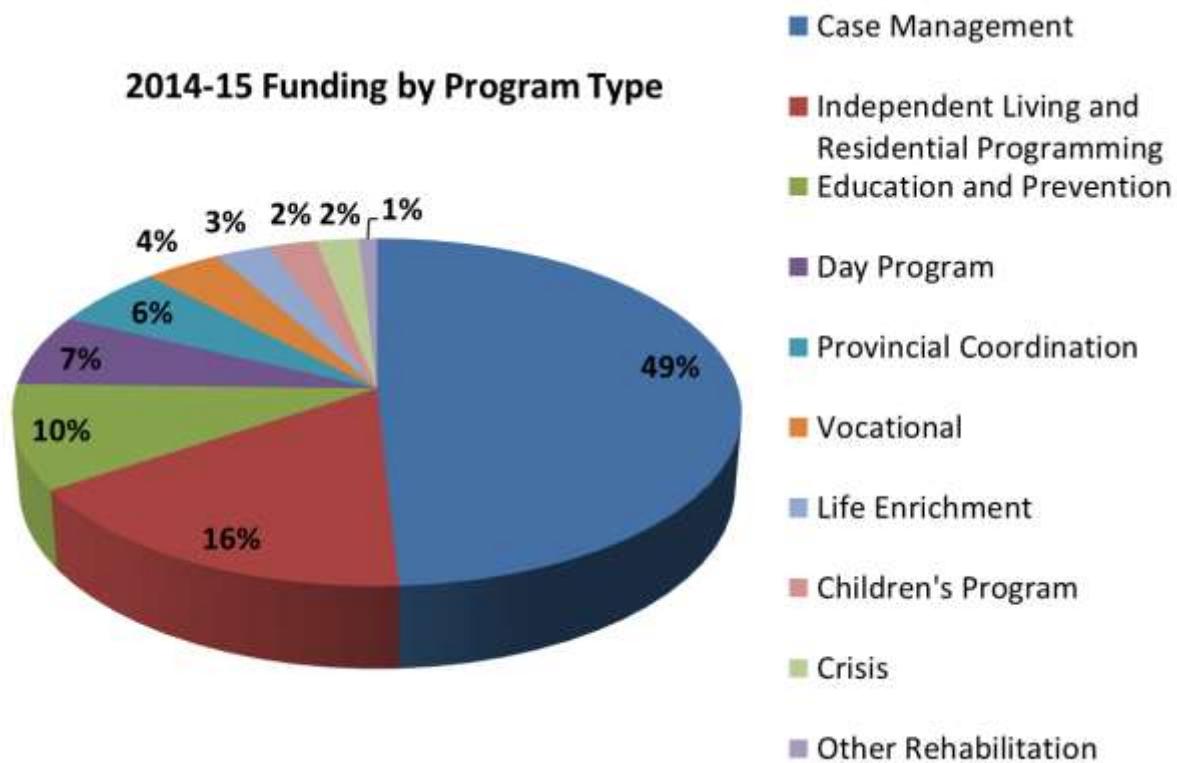
The Partnership remains innovative and provides leadership in service delivery for ABI survivors, families and caregivers through a sound service delivery philosophy that includes continued program evaluations, effective project management, quality support

services, as well education and prevention activities, while meeting the needs and requests of our service providers and core funder.

Continuum of Services

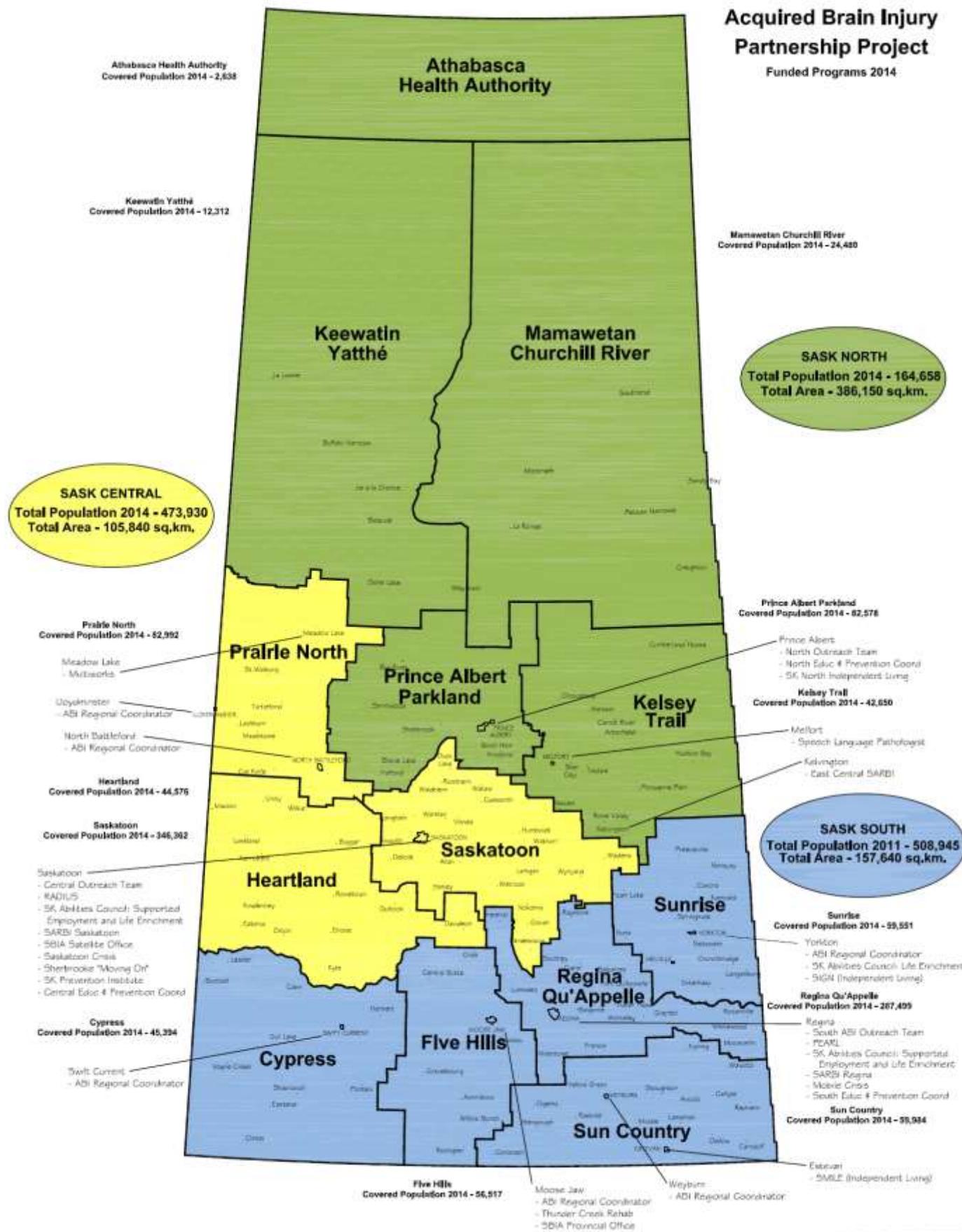
Programs funded by the ABI Partnership have been categorized into nine program types for the purpose of this report (excluding provincial coordination). Each program type is described in Section 1, and a description of each program along with service and site level data is included in the supplemental report [*Acquired Brain Injury Partnership Project - Program Fact Sheets: 2013-15*]. Figure 1 shows the percentage of funding allocated by these nine program types plus provincial coordination.

Figure 1: 2014-15 Funding Breakdown between Program Types



Each funded program is shown in the ABI Partnership Project service map in Figure 2.

Figure 2: Provincial Service Map, 2014



Acquired Brain Injury Partnership Project

Funded Programs 2014

Athabasca Health Authority
Covered Population 2014 - 2,638

Keewatin Yatthé
Covered Population 2014 - 12,312

Mamawetan Churchill River
Covered Population 2014 - 24,480

SASK NORTH
Total Population 2014 - 164,658
Total Area - 386,150 sq.km.

SASK CENTRAL
Total Population 2014 - 473,930
Total Area - 105,840 sq.km.

Prairie North
Covered Population 2014 - 62,992

Meadow Lake - Multisector
Oyokwetowin - ABI Regional Coordinator
North Battleford - ABI Regional Coordinator

Heartland:
Covered Population 2014 - 44,576

Saskatoon:
Covered Population 2014 - 346,302

Saskatoon:

- Central Outreach Team
- RADIUS
- SK Abilities Council: Supported Employment and Life Enrichment
- SABRI Saskatoon
- SBA Satellite Office
- Saskatoon Crisis
- Shetrooke "Moving On"
- SK Prevention Institute
- Central Edic 4 Prevention Coop

Cypress:
Covered Population 2014 - 45,394

Swift Current - ABI Regional Coordinator

Athabasca Health Authority

Prairie Parkland
Covered Population 2014 - 62,576

Prince Albert Parkland:
Covered Population 2014 - 62,576

Prince Albert:

- North Outreach Team
- North Edic 4 Prevention Coop
- SK North Independent Living

Kelsey Trail:
Covered Population 2014 - 42,650

Melfort - Speech Language Pathologist
Kelvington - East Central SABRI

SASK SOUTH
Total Population 2011 - 508,945
Total Area - 157,640 sq.km.

Sunrise:
Covered Population 2014 - 39,551

Yorkton:

- ABI Regional Coordinator
- SK Abilities Council: Life Enrichment
- SIGN (Independent Living)

Regina Qu'Appelle:
Covered Population 2014 - 267,499

Regina:

- South ABI Outreach Team
- PEARL
- SK Abilities Council: Supported Employment and Life Enrichment
- SABRI Regina
- Moose Criss
- South Edic 4 Prevention Coop

Sun Country:
Covered Population 2014 - 55,934

Estevan - SMILE (Independent Living)

Five Hills:
Covered Population 2014 - 56,517

Moose Jaw:

- ABI Regional Coordinator
- Thunder Creek Rehab
- SBA Provincial Office

Weyburn:

- ABI Regional Coordinator

Full Time Equivalents (FTEs)

Funded agencies provided information on position title/classification, regular hours worked per position per annum, qualifications and hourly rate of pay as part of the 2014-15 Annual Report. This information will be utilized to determine program inputs that relate to staffing for funding renewal preparation.

A total of 68.9 direct service FTEs are funded by the Partnership as reported at the end of the 2014-15 fiscal year, in addition to 2 FTEs dedicated to project management and 1 FTE dedicated to education and prevention coordination for a total of 71.9 FTEs. Table 2 displays the distribution of FTEs by health region and program type.

Table 2: Full Time Equivalents Funded by the ABI Partnership Project, 2014-15

Regional Health Authority	Outreach Teams	ABI Regional Coordinators	Day Program	Independent Living & Residential Options	Life Enrichment	Children's Program	Vocational	Crisis Management	Rehabilitation	Prevention/Education	Total
Cypress		1									1.0
Five Hills		0.8		0.6						1.5	2.9
Heartland											0.0
Keewatin Yatthé									*		0.0
Kelsey Trail			2						0.5		2.5
Mamawetan									*		0.0
Prairie North		1	1				0.32				2.3
Prince Albert Parkland	8			3						1	12.0
Regina	11.35		1.5	8.85	1		1	0.5		1	25.2
Saskatoon	9.2		2.2		0.6	2	2	0.5		2	18.5
Sun Country		1		1							2.0
Sunrise		1		1	0.5						2.5
Total	28.6	4.8	6.7	14.5	2.1	2.0	3.3	1.0	0.5	5.5	68.9

* Indicates services subcontracted with Prince Albert Parkland Health Region.

Funding

SGI

The Partnership has continued to be funded by SGI and managed by the Ministry of Health since its inception in January 1996. SGI has committed \$82.52 million in total funding to the Partnership, including \$16,208,838 in new funding for the current three-year contract period which began April 1, 2013 and will end March 31, 2016.

IN-KIND CONTRIBUTIONS

ABI Partnership agencies have reported on their in-kind financial contributions since the second (1999-2003) contract period. These contributions indicate the degree to which the Partnership's funded programs supplement their operations outside of the SGI grant dollars that they receive.

In-kind contributions include additional grants or other fundraising efforts, human resources (administrative, clinical, information technology, volunteer and practicum students), building occupancy, travel, program and office supplies, training, and professional fees. Costing of volunteer labour increased from \$20.85 to \$22.55/hour in 2014-15. Starting last contract period, in-kind revenue sources were added to this aggregate calculation (in addition to in-kind expenses).

The combined funding sources that support the ABI programming of Partnership funded agencies therefore includes both Partnership funding and agencies' in-kind contributions. This funding is reported in Table 3 by contract period.

Table 3: Funding by ABI Partnership Funded Agencies over the last six contract periods

Contract Period	SGI Funding for the Contract Period	Annual SGI Funding (average)	Annual In-Kind Funding (average)	SGI Grant dollars augmented by (%)
1996-1998	9.3M	3.1M	Not reported	
1999-2003¹	17.83M	3.5M	1.2M	34%
2004-2006	11.4M	3.8M	1.3M	34%
2007-2010	12.9M	4M	1.9M	47%
2010-2013	14.9M	4.9M	2.7M	55%
Current Contract 2013-2016	16.2M	5.2M	3.8M	73%

The table above illustrates a significant and increasing amount of in-kind contributions over time (which may be due, in part, to the better reporting of them). These in-kind contributions demonstrate funded programs' commitment to serving ABI survivors and their families and their willingness to partner to improve the scope and quality ABI Programming.

Information Sources

The current report summarizes the events and activities that occurred during the first two years of this contract period (2013-14 and 2014-15). Services delivered to ABI survivors and families, education and prevention activities, and public relations activities (i.e., the Partnership's website) are summarized. Information for this report was derived from the following information sources:

1. **The Acquired Brain Injury Information System (ABIIS).** Since 2000, funded programs have recorded each of their services in the ABIIS. This database contains information on client demographics, client referral sources, and the types of services provided to clients and their families. The ABIIS also contains a section for consultations which are events that occur between a funded agency

¹ 1999-2003 was a five year contact. All other contract periods were three years.

- and another person (other funded program, health professional, other professional, survivor, family of a survivor, etc.) regarding a survivor that is not registered in the information system. The ABIIS also tracks education and prevention activities including the time taken to prepare education events, and information about the delivery of the event including duration of the event, number of attendees, and topic area.
2. **Annual Reporting.** As part of funded agency accountability requirements, funded agencies are required to report on their activities over the previous fiscal year, with reports due to Health by April 30th each year. Reporting includes financial information (year-end financials, the next year's budget and in-kind financial contributions), confirmation that statistical data (ABIIS) reporting is up to date, written narratives on programming and partnership activities, and supplemental information requests that are often different from year-to-year. Supplemental information requests for this contract period included work with families, additional detail on the nature of each partnership, and staffing information including qualifications, hours of service and current salaries.
 3. **Client Outcome Reporting.** There are two client outcome measurements required to be submitted to the ABI Provincial Office: Goal Attainment summaries are submitted annually for all clients discharged in the previous fiscal year, and, additionally, in year two, reporting on all active clients in the previous fiscal year; and Mayo-Portland Adaptability Inventories filled out by staff, survivors, and/or significant others about each (consenting) client upon their intake to the program, and then at discharge, inactivation, or 18 months after intake, whichever comes first (also known as the anniversary measure).
 4. **Site Level Evaluations.** One of the reporting expectations for the 2013-16 contract period was that each funded program carry out an individual evaluation of their program due March 1, 2015. This evaluation was an opportunity for each agency to demonstrate the unique way in which their program works with clients and its unique benefits. Highlights from the site level evaluations are both presented by program type in the main body of this report, and in [Acquired Brain Injury Partnership Project - Program Fact Sheets: 2013-15] *Quotes have been pulled from individual programs' site level evaluations² and presented throughout the report to illustrate program impact.*

² Initial permission received by funded programs from respondents

This report is split into two major sections:

- 1) Direct Clients Services, and**
- 2) Education and Prevention Services.**

Each section will begin with a summary of Provincial information for the 2013-14 and 2014-15 fiscal years from the aforementioned information sources. After, each section will include a high level description of each program type with evaluation highlights derived from individual programs' site level evaluations.

SECTION 1: DIRECT CLIENT SERVICE

Section 1 will provide an overview of the services delivered to ABI survivors and their families in the first two years of this contract period, 2013-14 and 2014-15. There will be two main parts:

- 1) Provincial Overview:** A provincial summary of services provided to ABI survivors and their families looking at: direct service with registered clients; group activities open to registered and unregistered clients; services for families of unregistered survivors, and consultation events.
- 2) Program Types:** A summary for nine program types will be given, including program description, ABIIS and funding information, and site level evaluation highlights from the funded programs within that program type. *Note that five additional site level evaluations are summarized in Section 2: Education and Prevention Programming.*

Direct Client Service: Provincial Overview

The majority of service time in 2013-14 and 2014-15 was direct client service with registered survivors; however, education and prevention activities, as well as community groups (which is group service delivered to a variety of audiences – survivors, family, health and other service providers, support groups) service hours were also a large proportion, as shown in Table 4.

Table 4: ABI Partnership Project Funded Agencies' Annual Recorded Service Hours (Average of 2013-14 and 2014-15) by Type of Service

Type of Service	Average Annual Service Hours	% of Total Recorded Time
Direct Client and Family Service	61,563	85%
Consultations	1,967	3%
Community Groups	2,868	4%
Education and Prevention Activities	6,165	8%
Total	72,563	100%

Source: Acquired Brain Injury Information System

The following table shows direct client service event information over the last five years. Over the five-year timeframe 2010-2015, services have been relatively consistent, both in number of events and in the average amount of service received per client.

Table 5: Client Service Information over the Last Five Fiscal Years

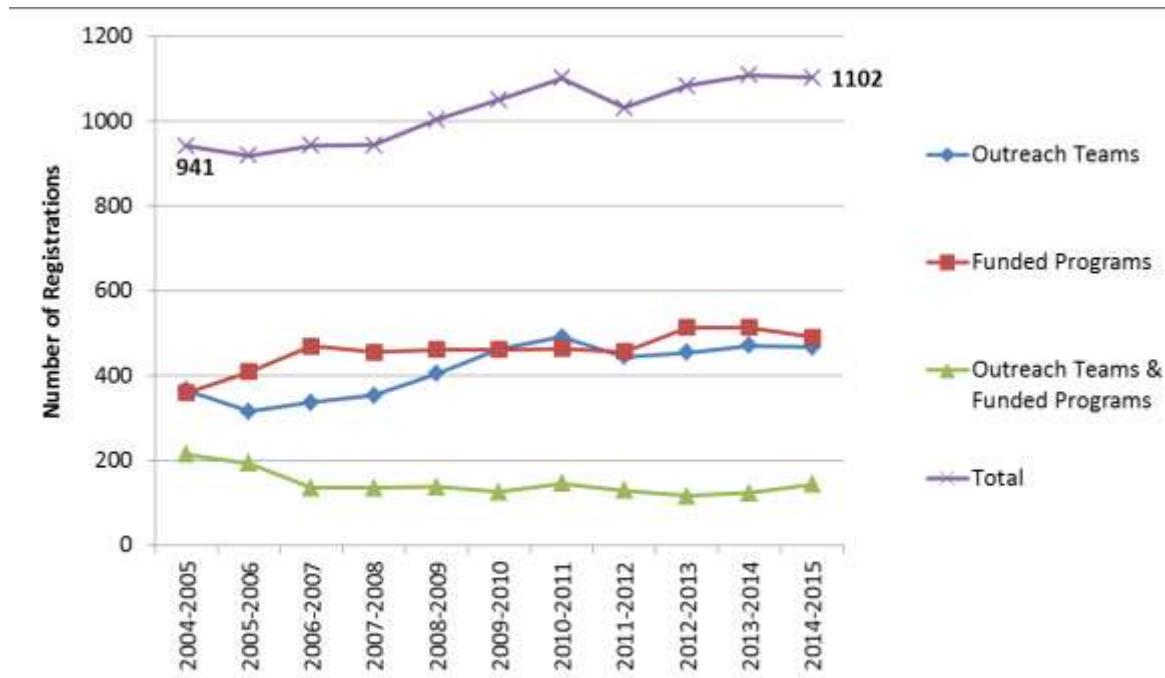
	2010-13 Contract Period				Current Contract Period to Date	
	2010-2011	2011-12	2012-13	2013-14	2014-15	
Total Service Events	49,194	44,649	49,767	50,296	49,601	
Average Service Events per client	44	41	45	45	45	
Average Service Event Time (minutes)	71	73	72	74	73	

Source: Acquired Brain Injury Information System

Over half of the ABI Partnership's registered clients are registered with the ABI Outreach Teams (55%). Forty-two percent are registered with the Outreach Team alone and

another 13% with both an Outreach Team and one or more other funded programs (see Figure 3).

Figure 3: Program Membership (Outreach vs. Funded) over the Last 10 Fiscal Years



Many of the statistical summaries that follow separate out ABI Outreach Team service information because the majority of clients are registered with an Outreach Team, and often ABI Outreach teams are the first point of contact for ABI survivors and their families after acute care.

The types of services provided in 2013-14 and 2014-15 differ between the outreach team and the rest of the funded programs (see Table 6). For the three outreach teams, “Case Management” makes up the largest proportion at 24% of all service time recorded which is consistent with their primary role. The rest of the funded programs provide a wide variety of services to clients and sometimes their families. The largest category was “Psycho-social Services” at 22% of all services recorded. Second is “Discipline Specific Therapy” which made up 21% of all service time in 2013-14 and 2014-15.

Table 6: Direct Client Service Time recorded by Type of Service/Program (Average between 2013-14 & 2014-15)

ABI Outreach Team's Direct Client Service Time		All Other Funded Agencies' Direct Client Service Time	
Type of Service Activity	% of Total	Type of Service Activity	% of Total
Case Management	24%	Psycho-Social Services	22%
Administration	12%	Discipline Specific Therapy	21%
Recreation & Leisure Activities	11%	Recreation & Leisure Activities	17%
Psycho-Social Services	9%	Life Skills Training	13%
Discipline Specific Therapy	9%	Case Management	10%
Counselling	2%	Service Provided to Families	4%
Neuropsychological Testing	0.1%	Vocational Services	3%
Nursing Interventions	0.2%	Administration	3%
Occupational Therapy Interventions	3%	Support Group	2%
Physical Therapy Interventions	1%	Residential Services	1%
Recreation Therapy Interventions	1%	Camp Event	1%
Speech Language Interventions	2%	Cognitive Interventions/Training	1%
Consultation/Education/Training	8%	Exercise	1%
Camp Event	7%	Consultation/Education/Training	1%
Residential Services	3%	Behavioural Interventions	0.3%
Support Group	3%	Community Development	0.3%
Life Skills Training	3%	No Show	0.2%
Vocational Services	3%	Educational Services	0.2%
Community Development	2%	Grand Total	100%
Educational Services	1%		
Service Provided to Families	1%		
Exercise	1%		
Cognitive Interventions/Training	1%		
Behavioural Interventions	0.5%		
No Show	0.3%		
Grand Total	100%		

* Note for Discipline Specific Therapy: 19% out of the 21% of total service time was for Recreation Therapy Interventions. Another 1% was for physical therapy interventions. The other 1% was made up of: nursing interventions, speech language interventions, and counselling.

Source: Acquired Brain Injury Information System

† Services Provided to Families includes the services done with or for families' benefit apart from that of the client. All of these services are attached to specific clients' registrations. Family codes include: case management, consultation , counselling, follow-up, psycho-social services, and referrals.

Service Utilization

Across all Partnership programs, there were 1,413 clients served this review period (2013-14 and 2014-15), with an annual average of 1,088 clients served and 328 new registrations. Client registrations came from a wide variety of referral sources as shown in Table 7.

Table 7: Referral Sources by Type of Service/Program for 2013-14 and 2014-15 Registered Clients

ABI Outreach Team's Clients		All Other Funded Agencies' Clients	
Referral Sources:	Percentage of Total Referral Sources	Referral Sources:	Percentage of Total Referral Sources
Rehabilitation Services	31%	ABI Outreach Team	27%
Acute Care Services	29%	Other Health Care Professionals	15%
Other Health Care Professionals	12%	Family	7%
Client Self-referrals	7%	Client Self-referrals	6%
Family	5%	Rehabilitation Services	5%
ABI Outreach Team	3%	ABI Regional Coordinator	5%
SGI	2%	Long Term Care/Special Care Homes	3%
Children's Rehabilitation	2%	Sask South Outreach Team	3%
Other agencies/programs making up 1% or less of total	10%	Sask Central Outreach Team	3%
		Acute Care Services	2%
		Community Services	2%
		Mental Health Services	2%
		Other Health Services	2%
		Social Services	2%
		Vocational/Avocational Services	2%
		Other agencies/programs making up 1% or less of total referrals each	15%

Source: Acquired Brain Injury Information System

The top five causes of injuries seen by the ABI Partnership Project, accounting for over two-thirds of direct client service time recorded in 2013-14 and 2014-15, were:

1. Motor vehicle collision (MVC) - 22% of direct client service time
2. Stroke - 22% of direct client service time
3. Encephalitis/Meningitis - 9% of service time
4. Other (not Traumatic Brain Injury) - 8% of service time
5. Blow to head (not assault) – 8% of service time

While service time for clients injured from Stroke equals that for MVC clients, MVC clients typically stay in programming longer. Table 8 shows clients served in the last five fiscal years who were both inactivated and had a recorded end date. Clients injured in an MVC showed a time in program over twice that of clients injured due to Stroke.

Table 8: Time in Program across Funded Agencies based on April 1, 2010 to March 31, 2015 Registration Data

Cause of Injury	Average Years in Program	Number of Clients
Bicycle	4.2	3
MVC - All Causes	4.0	225
Blow to head (assault)	3.7	62
Aneurysm	3.4	46
Other (not Traumatic Brain Injury)	3.1	43
Traumatic Brain Injury (other)	3.0	27
Encephalitis/Meningitis	3.0	22
Tumour	2.6	95
Anoxia	2.5	32
Shaken baby syndrome	2.5	7
Fall	2.3	69
Snowmobile Crash	2.1	4
Blow to head (not assault)	2.0	16
Blow to head (sports related)	1.7	9
Stroke	1.6	318
All-Terrain Vehicle (ATV) Crash	1.4	6
Penetrating (missile wounds)	0.2	2
Grand Total	2.7	986

Clients injured through an MVC also tend to receive more hours of service than clients injured through other means. This was shown in our last program evaluation [10], and the trend has continued. Of the clients receiving service in 2014-15, MVC clients had been receiving service for 5 years on average versus an average of 2.5 years for Stroke clients (similar to the result shown in Table 8 calculating total length of stay in programming). Clients injured through MVC seen in 2014-15 received an average of 40 hours of service versus 33 hours for Stroke survivors seen (source: ABIIS).

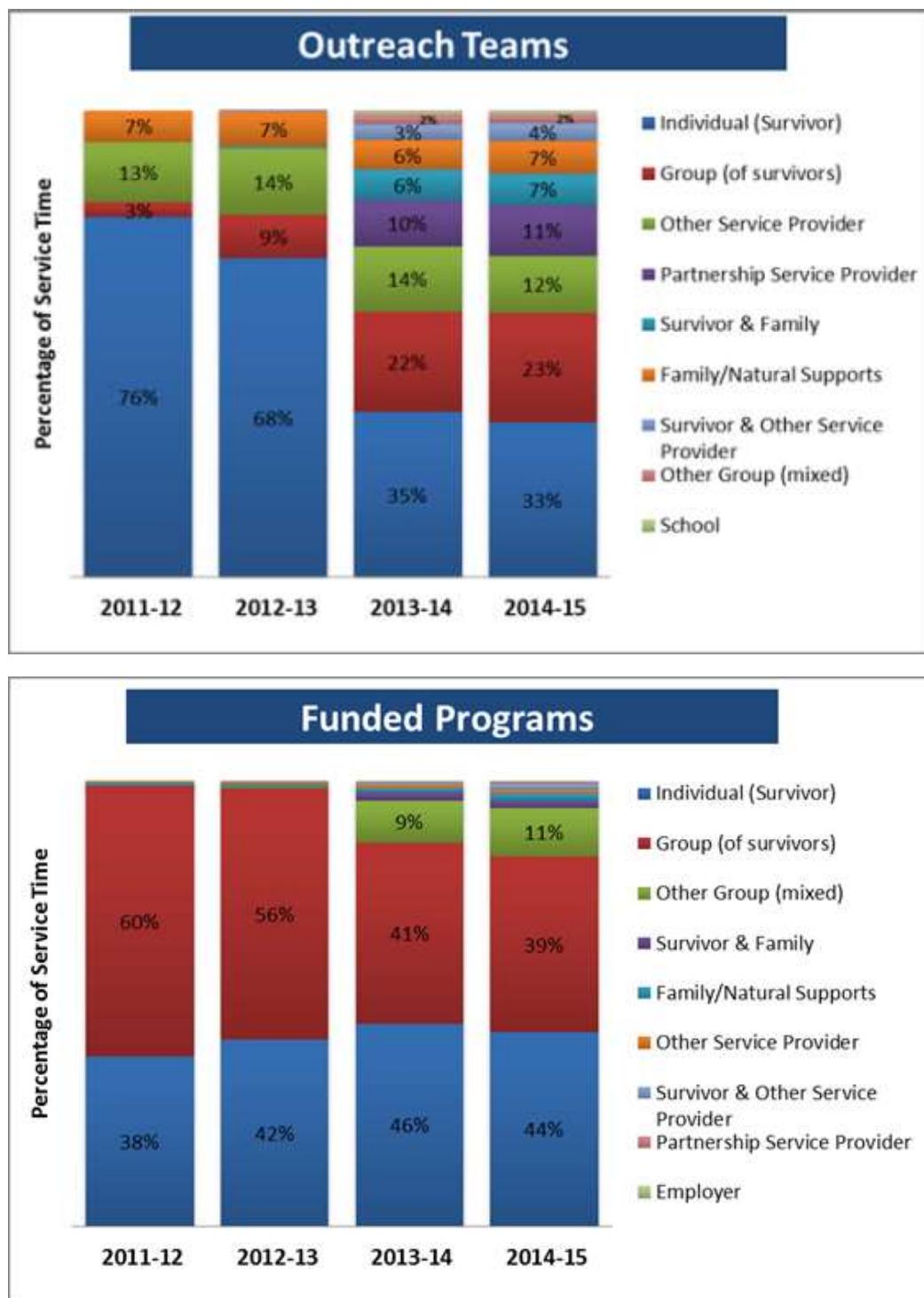
This pattern of service speaks to the longer-term nature of service needed by clients with a traumatic brain injury, such as those sustained in an MVC. This could be due in part to the varied goals of the younger MVC clients, and the severity of injuries often resulting from injuries due to MVCs.

Service Coordination

SERVICE RECIPIENTS

To get a better idea of the service coordination carried out by agencies funded by the Partnership, programs were told to code their service recipients differently just prior to the 2013-14 fiscal year. Not “who did the service benefit”, but rather “who did you communicate with”. This change in coding has provided a better picture of the types of people/services funded programs communicate with, and with what frequency (see Figure 4). ABI service providers, both within and outside of the ABI Partnership, spend a significant amount of time engaging with the natural supporters of their clients including families and other care providers.

Figure 4: Service Recipients Recorded in the last four fiscal years



CONSULTATIONS

Funded agencies often give information and advice to ABI survivors and/or their families, other funded programs, health and other professionals, and others through

consultations. These exchanges are not associated with registered clients (consultations regarding registered clients are recorded as direct client service).

In the 2013-14 and 2014-15 fiscal year, there were 4,142 consultations for a total of 3,934 hours of service time (average of 2,071 consultations per year).

The majority of consultations were done from programs either providing case management services (i.e., Outreach Teams and Regional Coordinators) or the Saskatchewan Brain Injury Association (SBIA) which maintains a 1-800 telephone line. These programs accounted for 45% and 44% of consultations respectively (see Table 9). The largest proportion of the consultations (41%) was regarding a specific individual (see Table 10).

Table 9: Consultations made in 2013-14 and 2014-15 by Program

Program	Percent of 2013-14 and 2014-15 Consultations
Case Management	45%
Saskatchewan Brain Injury Association	44%
SARBI Programs	7%
Other Funded Programs	4%
Grand Total	100%

Table 10: Consultations made in 2013-14 and 2014-15 by Purpose

Purpose of Consultation	Percent of 2013-14 and 2014-15 Consultations
Specific Individual	41%
Services	20%
Information Gathering	15%
Support Group	7%
Family Support	5%
ABI Partnership Project	5%
Brain Injury Information	5%
Education and Prevention	2%
Mild Brain Injury	1%
Grand Total	100%

Consultations took place with a wide variety of people and programs. The largest proportion of consultations took place with ABI survivors and their families (31% combined), followed by SBIA and acute care services (see Table 11).

Table 11: Consultations made in 2013-14 and 2014-15 by Person/Program consulted with

Purpose of Consultation	Percent of 2013-14 and 2014-15 Consultations
ABI Survivors	16%
Family	15%
Saskatchewan Brain Injury Association (SBIA)	12%
Acute Care Services	10%
Other Health Care Professionals	8%
ABI Outreach Team	7%
Community Services	6%
Miscellaneous	5%
Rehabilitation Services	4%
ABI Regional Coordinator	2%
Long Term Care/Special Care Homes	2%
ABI Partnership Project Program	2%
Other Persons/Programs - each accounting for 1% or less of total consultations	10%
Grand Total	100%

Occasionally, consultations result in a referral to another program or service. Almost a quarter of consultations made in 2013-14 and 2014-15 resulted in a referral (22%), equaling 911 referrals. The largest proportion of referrals was to one of the three ABI Outreach Teams (35%).

REFERRALS TO OTHER SERVICES

Referrals are also made to other services in the course of direct work with registered ABI clients. For case management programs (ABI Outreach Teams³ and ABI Regional

³ This includes referrals made by the Prince Albert Independent Living program whose services often overlap with the North Outreach team.

Coordinators), there were 952 referrals made in 2013-14 and 2014-15⁴. The largest percentage of these referrals was made to Other Health Care Professionals (12%).

REPORTING ON PARTNERSHIPS

ABI Partnership services were established to augment existing health and human services. Service partnerships are integral to successful service delivery to the ABI community as it was not intended that a separate, parallel service system be established for ABI through the Partnership. Agencies work with other service providers funded within the ABI Partnership as well as in their local communities to meet client needs and to improve long-term program and client outcomes. Research suggests that because there is a complex array of needs for ABI survivors, case management, service coordination and navigation support is critical, especially during transitional life stages and between types of services (i.e., from acute care to rehab to community-based services) [2,3,14]. Programs work in partnership with other services to address immediate client goals such as psychosocial support, residential support, physical and cognitive rehabilitation, independent living skills development, vocational support, crisis intervention, and avocational and life enrichment activities. They also provide education and training support and work to address systemic service gaps and plan for service improvements through inter-agency networking and community development activities. Many partnering activities also focus on important injury prevention work.

True to its namesake, “Partnerships” are a foundational service delivery principle of the ABI Partnership. To profile the important roles that service partners fulfill, funded agencies report annually about existing partners and any plans for establishing new ones. The importance of maintaining solid service partners was also profiled by many agencies who sought feedback from their service partners as part of their site-level evaluations this contract period.

Annual Reporting on Partnering

In addition to the regular intra-Partnership collaboration that occurs at the local level and across service areas, the following listing, while not exhaustive, demonstrates the breadth of partnerships our funded agencies engaged in during this two-year reporting period:

⁴ Due to a change in coding procedure in April 2013, referral numbers may have been underreported in the last two fiscal years.

Health region partnerships – (both inter- and intra-region) out- and inpatient therapies, mental health, addictions, home care, personal care homes, long-term care, social work, acute care discharge planners, public health, primary health, psychology, health promotion, physicians (generalist and specialist such as family, physiatrists, neurologists, psychiatrists), acute care nursing, acute care rehabilitation services, dieticians, chronic disease management staff, medical records, driver evaluation program staff

Community emergency services – EMS/ambulance, police/RCMP, Fire

First Nations organizations - tribal councils, Health Canada/First Nations Inuit Health (federal health funding), First Nations housing authorities, First Nations Education, First Nations services within health regions, Friendship Centres

Education System - various school divisions and districts in the Kindergarten to Grade 12 system, and the Universities of Saskatchewan and Regina and Saskpolytechnic for practicum students and volunteers (faculties include: Social Work, Education, Kinesiology and Health Studies, Nursing, Public Health)

Employment - employment networks, Partners in Employment, local employers (for client work placements, paid employment and volunteer opportunities)

Income Security - CPP Disability, Public Trustee, other third party/health insurers for disability benefits

Other human service Provincial Government Ministries - Advanced Education; Economy (including CanSask, driver training, and disability supports); Education; Justice (including Corrections and Probation Services); Social Services [including Income Security (Saskatchewan Assistance Plan (SAP) and Saskatchewan Assured Income for Disability (SAID), Cognitive Disability Strategy (for individualized/flex funding), Community Living Services Division]

Other Disability-serving organizations - Saskatchewan Association of Community Living (SACL), Saskatchewan Institute on Community Living (SICL), Neil Squire Society

Food Security – food banks, Good Food Box programs, etc.

Other – SGI catastrophic injury specialists, humane societies, Intersectoral Committees (RICs, HUB), Heart & Stroke Foundation, YMCA/YWCA, municipal

governments, legal aide/services, Hutterite colonies, Community Service Organizations (e.g., Kinsmen), SIAST dental hygienist program, WCB, housing authorities, Canadian Mental Health Association (CMHA), Salvation Army

Over the 2013-14 and 2014-15 fiscal years, program partnerships and special activities occurred across our service continuum and are grouped under the following themes:

- **Referrals** – to and from various service agency partners
- **Community development** – activities to partner on service delivery and to address service gaps/challenges
- **Education and Prevention** – along with the dedicated role played in prevention and education activities by the Education and Prevention Coordinators, the Saskatchewan Prevention Institute and Saskatchewan Brain Injury Association, other ABI Partnership staff are also involved in knowledge transfer/exchange activities regarding brain injury through: consultation and in-services to health and other human service professionals; primary prevention of ABI through resource development and distribution; event organization and delivery; and public awareness activities and advertising
 - Education Events – distributing brain-injury related information at Safety Days, Health Fairs, telehealths, webinars, Survivor and Family educational series, child passenger safety training, and at other community events
 - Resource development and distribution – the resources distributed by funded agencies cover a wide range of topic areas and serve a variety of audiences. General topics referenced in this contract period include:
 - Various brain injury education topics - memory, fatigue, seizures, addictions and ABI, anxiety and depression, communication, relationships, stress, anger/behaviour management, budgeting/money management, nutrition, healthy lifestyles, adaptive exercise, etc. which are addressed by gift or loan of pamphlets, journal articles, books, videos and by providing information on websites/resources. Resources are also made available through the lending libraries of the three Outreach Teams and SBIA
 - Prevention initiatives – funded agencies engage in a wide variety of education activities geared toward primary injury prevention covering the topic areas of general brain and brain injury education, Stroke Education, ATV safety, brain injury awareness activities such as Brain Walk (targeted at Kindergarten to Grade 6) and PARTY (targeted to

high-school aged youth), bike helmet usage, child passenger safety, bike safety, snowmobile safety, and Scooter Safety

- **Public Relations/Public Awareness** - activities to promote specific services and to educate other service providers and the general public about acquired brain injury and the work of the ABI Partnership Project include:
 - In-services and presentations
 - Electronic and hardcopy newsletters
 - Posting information on their own and other agency websites
 - Submitting articles on brain injury and promoting events through various media formats (community and municipal newspapers, radio, television)
 - Brain Awareness Week (March, yearly) - holding events and/or manning displays
 - Brain Injury Awareness Month (June, yearly) - holding events, conducting public service announcements (PSAs), manning displays, distributing resources
- **Human Resources** - agencies benefit by partnerships established to enhance programming through additional human resource inputs.
 - Practicum students – many agencies benefit from student practicum placements with their programs. Examples of academic disciplines of practicum students include, but are not limited to: Social Work, Education, Nursing, Kinesiology and Health Studies, Public Policy
 - Volunteer Opportunities – many agencies rely on volunteer placements for extra staffing support to deliver client services (both core and specialized services) and have been successful in recruiting volunteers through Seniors' organizations, university faculties and community colleges, as examples. Agencies also partner with local businesses to create volunteer opportunities for their clients.
 - Work opportunities – some agencies enhance their seasonal (summer) programming through summer student grant programs. Additionally, agencies help clients gain employment experience with community partners.
- **Life Enrichment activities** – a variety of community partners and local businesses provide no or low-cost client access to community services/events (theatre, sporting) and program/meeting space. Such partners include restaurants, libraries, sports facilities, Legions, churches. Examples of life enrichment activities clients benefit from include:

- bowling; pool; exercise activities such as walking, yoga, Sports for Life (badminton, basketball, volleyball, floor hockey, table tennis, etc.); attending cultural events such as theatre performances, art gallery and museum tours; art, crafts, and writing classes; and Children's and Adult Recreational/Educational and Wilderness Camps

Interagency/Intra-Partnership Networking/Relationship-Building – these partnerships serve to address client access to needed services and to work on service barriers. Many staff are involved in community development activities at the local or regional level to bring the voice of ABI to various issues that require system-level responses such as: disability support services, employment networks, disability benefits networks (such as the Disability Income Support Coalition (DISC) and the Cognitive Disability Strategy), housing (with local partners in both the public and private sector, including housing authorities), Regional Intersectoral Committees, South and Central Saskatchewan ABI Networking committees (which includes community agencies outside the ABI Partnership).

- **Fundraising/additional revenues** – several of our funded agencies actively solicit for additional funds to enhance their programming. Specific fundraising efforts include: hosting dinners and walkathons, point-of-sale donations, membership fees, obtaining free equipment or services (e.g., event passes, furniture, media, advertising), running a used clothing store, obtaining grant funding [for individual client support, hiring summer staff, providing additional programming hours (extra hours a day or days a week), or providing targeted programming to ABI clientele with specific characteristics (e.g., grouping ABI clients by age (younger), by cognitive ability, by ethnicity (Aboriginal) or by gender) or special programming such as children's and adult wilderness camps]
 - Examples of other funding sources include: individual citizens, corporations, other government sources such as Ministry of Parks, Culture and Sport (Community Initiatives Fund, Sask Lotteries), CanSask, municipal government grant programs, United Way, Cognitive Disability Strategy, federal grants

SERVICE BARRIERS/CHALLENGES

Although our service continuum and its service partners meet a wide range of client needs, feedback from ABI funded agencies continues to indicate that a number of service gaps persist.

As part of annual reporting programs are asked to speak to the barriers /challenges in service delivery and any solutions taken to address these challenges.

Below are the narrative responses from 2014-15 reporting to the question, ***What barriers and/or challenges have been encountered and what has your program done in response?*** The bracketed numbers below denote the number of programs that indicated a service barrier/challenge related to the following themes:

- **transportation/access to services for rural/remote clients:** (10) – includes access to (because of lack of supply or distance to services) and affordability of
- **lack of housing options/supports:** (9) - this includes inadequate supply and condition, lack of affordable stock, inappropriate options (due to younger age of clients, level of supervision/security available, and lack of companion programming available)
- **lack of service awareness/lack of client referrals:** (7)
- **limited human resources and/or specialized training within program to meet client need:** (7)
- **vocational services:** (5)
- **limited access to specialized health services:** (4) – including accommodating/tailoring service response by: general practitioners (GPs), dentists, outpatient therapies (physical/occupational/speech language), neuropsychology, home care, mental health, addictions
- **income security:** (3) - as related to inability to access needed services and to meet basic living needs (food/shelter)
- **efforts to address family support needs** (3)
- **recruitment and retention of staff/volunteers:** (2)
- **geographic distance for service provision:** (2)
- **programming tailored to specific needs (ethnicity, age, ability):** (2)
- **better service linkages between acute and community care:** (2)
- **access to wheelchair accessible programming space:** (1)
- **lack of resources to address service need:** (1)

Agency responses/solutions to service barriers/challenges

Community development and networking activities – as indicated in the Partnering activities section above, many agency representatives remain involved on a number of committees to address the service barriers/challenges identified at a system-level. They

advocate for their clients' access to services and work with their community partners to find creative solutions to address service gaps.

Because of the relevance of the issues these strategies have sought to address, this contract period, many funded agency staff were involved in consultation processes attached to both the Mental Health and Addictions Action Plan and the Disability Strategy.

Mental Health and Addictions Action Plan: in addition to a written submission from the Provincial ABI Advisory Group on behalf of the ABI Partnership to the Action Plan team that outlined the high prevalence of both mental health and addictions issues within the ABI population and the need for better screening and accommodation of ABI needs within these service systems, a few front-line ABI staff were also consulted by the Commissioner of this strategy.

The Disability Strategy focused on six key action areas: housing, transportation, employment, education, community inclusion, and support for caregivers. Of these six key areas, those which ABI staff identified during public consultations with persistent service gaps for ABI were: housing, caregiver support and transportation.

Examples of other issues that funded agencies continually work to address include: brain injury program awareness, housing deficits, client employment opportunities, and income security and disability benefit issues.

Intra- and Inter-agency Collaboration – there are collaborations that frequently occur between Partnership funded agencies to deliver joint programming such as survivor/family education and support groups, the SBIA Camp, ABI Children's and Adult camps and other social and recreational programming. In addition, related to individual client service - several programs spoke to the complex needs of their active clients which has necessitated their engagement in multi-agency, creative, collaborative service responses to address legal issues (such as the Mental Health Court), housing and addictions issues.

Fundraising – as also indicated in the Partnering section above, because the grant resources received from the ABI Partnership are finite and cannot address the full range of needs of ABI survivors, many of our funded agencies raise additional funds to enhance programming.

Client Outcomes

MAYO-PORTLAND ADAPTABILITY INVENTORY – 4TH EDITION (MPAI-4) Overview

A number of outcome measures were utilized in the initial evaluations of the ABI Partnership. In 2006, a group of ABI Partnership service providers, the Outcomes Working Group, choose one comprehensive measure with good reliability and validity to be the provincial outcome tool for the Partnership – see Appendix B: Mayo-Portland Adaptability Inventory-4 (MPAI-4), page 122.

The MPAI-4 is a measure of long-term (post-acute) outcome following an ABI [15]. It provides an indication of challenges in terms of impairments, activity, and participation of the client [16]. The protocol, as of 2007, has been to have service providers, clients and/or significant others (e.g., family) fill out the inventory after their intake to program, and either at clients' 18-month anniversary or inactivation from the program. Significant improvements in clients' functioning were seen in both the 2007-10 and the 2010-12 Program Reviews [9-10].

Analysis

Four hundred and two (402) complete (intake and anniversary) inventories have been submitted to the ABI Provincial Office to date (received between December 2007 and April 2015):

- 388 from Service Providers
- 239 from ABI Survivors
- 143 from Significant Others

The demographic information that follows is based on all 402 complete outcome packages:

- The average time between intake and anniversary measurement was 446 days (1.2 years)
- Average age at time of injury was 45 years; Standard Deviation of 18.8 years
- Respondents were primarily male (62%)
- The most common cause of ABI was Stroke (35%) followed by motor vehicle collisions (21%) and tumours (9%)
- Fifty-nine percent of respondents had no insurance, 20% were insured with SGI, 17% had other insurance, and 4% were covered under Workers' Compensation
- Most of the respondents either had a Home Health Region of Regina Qu'Appelle (31%), Saskatoon (28%), or Prince Albert Parkland (12%)

- Forty-six percent of clients lived in their own or family home independently, 27% lived at home with assistance (combining the two categories “less than 8 hours/day” and “greater than 8 hours/day”), and an additional 8% lived at home under supervision (requiring supervision virtually all the time).
- Most clients (83%) had attained either a secondary education (48%) or a post-secondary education (35%).

A paired sample t-test was conducted on the available data to detect any statistically significant reductions in difficulties arising from an ABI on the total scores, and on each of the three subscales: **Ability** (i.e., sensory, motor, and cognitive abilities); **Adjustment** (i.e., mood, interpersonal interactions); and **Participation** (i.e., social contacts, initiation, money management). Significant improvements were noted on all subscales and the total scores for all three rater groups: staff, significant others, and survivors. Average means are shown in Figure 5, and their associated t-tests are shown in Table 12.

Table 12: MPAI-4 T-Tests

Rater	Subscale	Intake	Anniversary /discharge	T-test Result
Client Self-Ratings	Ability	M=16.1,SD=10.1	M=12.8;SD=10.4	t(236)=4.5, p < .001
	Adjustment	M=18.7,SD=9.5	M=14.5,SD=9.6	t(235)=5.4, p < .001
	Participation	M=14.9,SD=9.3	M=11.8,SD=9.8	t(236)=5.1, p < .001
	Total Score	M=41.0,SD=17.7	M=31.8,SD=19.6	t(235)=6.6, p < .001
Service Provider Ratings	Ability	M=13.8,SD=9.8	M=11.5,SD=9.8	t(387)=9.6, p < .001
	Adjustment	M=13.9,SD=9.2	M=11.4,SD=9.9	t(384)=11.4, p < .001
	Participation	M=11.2,SD=8.2	M=9.3,SD=8.6	t(387)=10.4, p < .001
	Total Score	M=32.5,SD=17.1	M=26.5,SD=19.2	t(385)=12.8, p < .001
Significant Other Ratings	Ability	M=14.7,SD=10.0	M=13.0,SD=10.2	t(141)=3.2, p = .002
	Adjustment	M=15.2,SD=9.3	M=13.4,SD=9.5	t(141)=2.7, p = .007
	Participation	M=12.6,SD=8.5	M=11.2,SD=9.8	t(141)=2.8, p = .005
	Total Score	M=36.9,SD=19.4	M=32.5,SD=21.3	t(141)=3.4, p = .001

Figure 5: Average Scores for every Subscale and Rater Type (Service Provider, Client, and Significant Other)



When used for individuals, scores on the MPAI-4 can be used to classify the severity of a client's brain injury relative to others with a moderate to severe brain injury [15]. These scores are based on normed data, and are used to classify clients into five groups: 1) Relatively Good Outcomes, 2) Mild Limitations, 3) Mild to Moderate Limitations, 4) Moderate to Severe Limitations, and 5) Severe Limitations.

Service Providers' MPAI-4 ratings revealed that 79% of clients experienced improvement as shown on the inventory, with almost half of clients (46%) getting a less severe diagnostic classification based on Malec & Lezak's [15] normed data at their anniversary/discharge measurement.

Seventy-two percent of clients indicated, through their self-ratings, that they had experienced improvement.

The significant other ratings were less positive, with only 66% indicating, through their ratings, that their loved one showed improvement.

Given the number of clients who show improvement in diagnostic classification with Malec & Lezak's [15] normed data, the service provider MPAI-4 ratings suggests that improvement shown on this inventory may be *clinically significant* as well as *statistically significant*.

GOAL ATTAINMENT: 2013-14 GOAL ATTAINMENT SUMMARY

Overview

Arising out of the 1999-2003 evaluation was a recommendation to develop a standard tracking tool that could be used to measure goal attainment. As a result of this recommendation, programs began tracking goal attainment after April 1st of 2004, and have been submitting annual goal attainment summaries since 2005 using the Goal Attainment Template (see *Appendix C: Goal Attainment*). The first evaluation of this measure showed that 91% of submitted goals were fully to partially achieved (62% achieved, 29% partially achieved). The 2007-10 evaluation indicated that 90% of submitted goals were fully to partially achieved (62% achieved, 28% partially achieved).

The goal attainment information for clients inactivated or discharged this review period (2013-14 and 2014-15) shows that 89% of goals worked on with clients (that were not withdrawn) were fully to partially achieved (66% achieved, 23% partially achieved). Thus, our evaluation of goal attainment information has been quite consistent since our first set of results in 2005, and has continually shown that the vast majority of client goals with our funded programs achieve success.

Analysis of clients Discharged/Inactivated in 2013-14 and 2014-15

There were almost 700 clients discharged or inactivated in 2013-14 and 2014-15, who had over four thousand (4,000) goals between them. These numbers are comparable to previous years (see Table 13).

Table 13. Summary of Goal Attainment Results from the Last Five Fiscal Years

Fiscal Year	Number of Clients Discharged	Number of Recorded Goals	Average Goals per Client
2010-11	306	1,702	6
2011-12	404	1,731	4
2012-13	325	1,528	5
2013-14	371	2,183	6
2014-15	323	1,947	6
Five Year Average	346	1,818	5

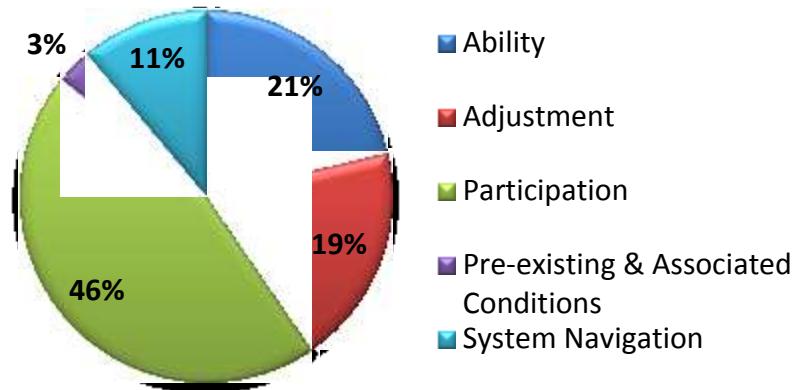
*Source: Goal attainment program summaries submitted annually by funded agencies

Closer Look at the Breakdown of Goal Categories

The goal summary template was revised in 2013 to be divided into five goal categories: Ability, Adjustment, Participation, Pre-existing and Associated Conditions, and System Navigation. With the exception of System Navigation, these goal categories correspond to the Mayo-Portland Adaptability Inventory (4th Edition) subscales.

The most highly represented goal category was “Participation” at 46% of all client goals for the 694 clients discharged between April 1, 2013 and March 31, 2015 (see Figure 6).

Figure 6: Percentage of Goals in each of the Five Goal Categories, 2013-14 and 2014-15 Data (includes withdrawn goals)



A more thorough analysis of the five goal categories for the 2013-14 and 2014-15 fiscal years is shown in Figure 7 below. This breakdown does not include withdrawn goals, as they should not factor into goal achievement levels.

**Figure 7: Goal Achievement Breakdown for the Five Goal Categories, 2013-14 and 2014-15
(excludes withdrawn goals)**

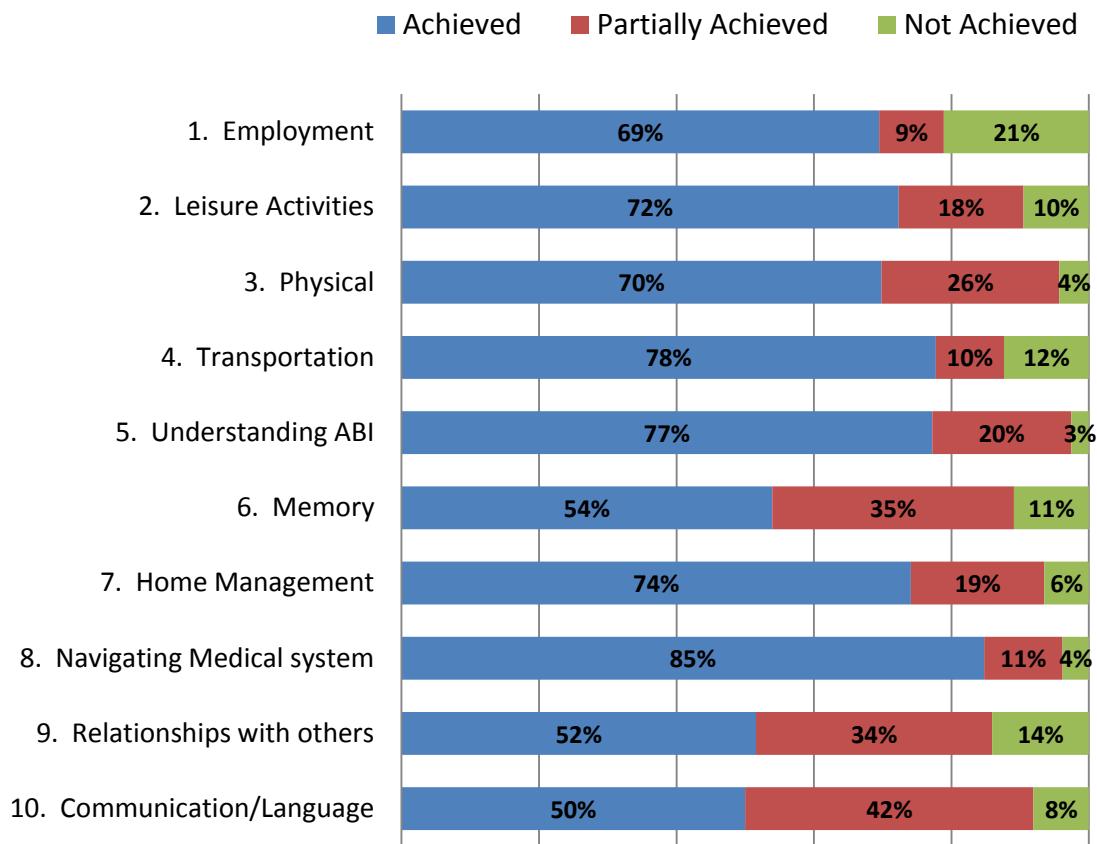


As can be seen in Figure 7, the greatest full achievement of goals is seen in the categories “System Navigation” (85% achieved), and the least goal achievement is seen in “Pre-existing and Associated Conditions” (20% not achieved).

Closer Look at the Breakdown of Goal Areas

There are many areas within each *Goal Category* (see Appendix C: *Goal Attainment* for the template). The 10 most frequently reported goal areas, accounting for almost half (49%) of all goals submitted, are shown in Figure 8 with their respective goal attainment. Fairly high levels of achievement are seen in all top goal areas. The poorest levels of full achievement for these top areas are seen in the areas of *communication/language, relationships with others, and memory*.

Figure 8. Goal Achievement on the top 10 most frequently reported goals (withdrawn goals have been removed from the total)



Some highlights from the active client goal summaries are:

- The highest levels of achievement (with percentage achieved shown in brackets) were recorded for “Navigating the Financial System” (91%), “Other Participation” (90%), “Advocacy” (89%), “Navigating the Medical System” (85%), and “Other System Navigation (82%). *These results demonstrate the effectiveness of our funded programs in assisting clients to navigate complex systems, one of the original goals of the ABI Partnership* (Acquired Brain Injury Working Group, 1995).
- The goal areas with the highest levels of non-achievement are “Addictions” (29% of goals not achieved), and “Behavior Management” (25% of goals not achieved).* Overall, 66% of the goals submitted for 2013-14 and 2014-15 were recorded as fully-achieved compared to only 41% full-achievement in the area of “Addictions” and 40% for “Behavior Management” which speaks to the difficulty of working in these areas.

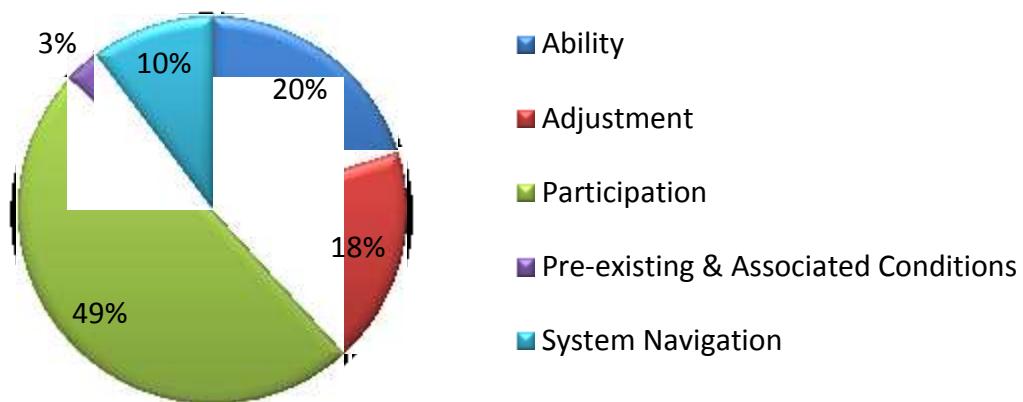
- The two goal areas with the highest percentage of withdrawn goals are “Spirituality” (at 28%) and “Employment” (at 21%).

Analysis of clients who remained active in 2014-15

At the end of the second year of each contract period, Partnership funded programs are also asked to submit aggregate goal attainment information to the Ministry of Health for clients that are still active on their caseloads. This gives us a different picture of goal achievement for clients still engaged in programming, rather than at the conclusion of their involvement. Unlike the summaries for discharged clients, the goal attainment summaries for active clients include “in progress” as an option for achievement level, and give an indication of goals that are achieved earlier in a client’s service involvement.⁵

There were 6,428 goals submitted for 928 active clients in 2014-15, averaging seven goals per client. Almost half (49%) of the recorded goals were regarding “Participation” (see Figure 9). Excluding withdrawn goals, 76% of goals were partially to fully achieved (23% partially achieved, 53% achieved), and 18% of goals still in progress⁶.

Figure 9: Percentage of Goals in each of the Five Goal Categories for Clients Active in 2014-15 (includes withdrawn goals)

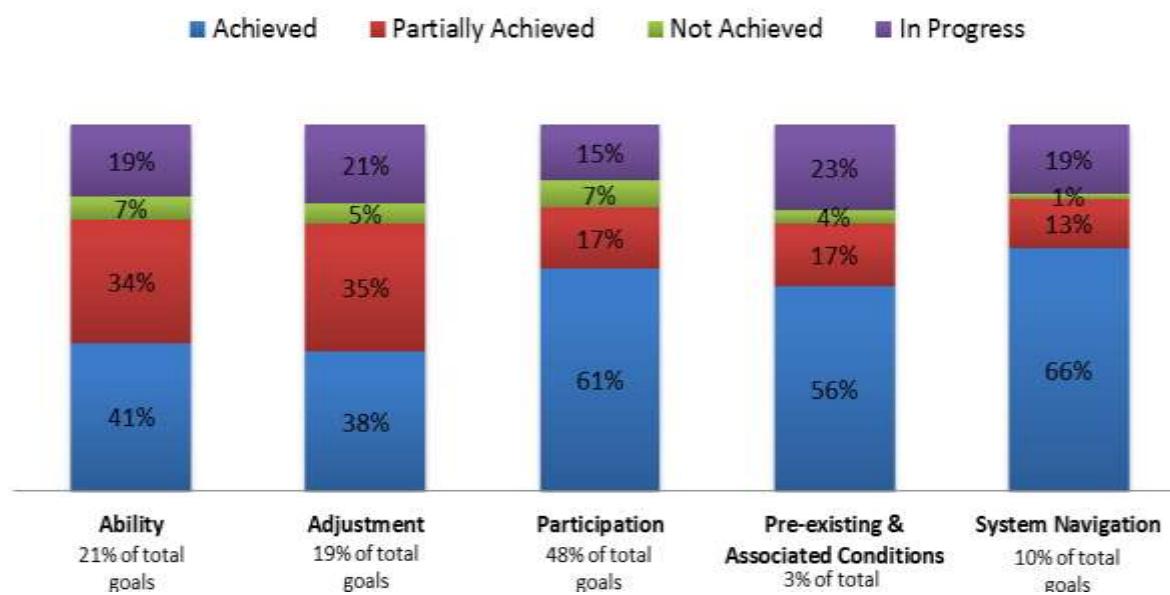


⁵ “In progress” column used by 21/26 programs reporting. Goal Attainment reporting not received in time from two programs.

⁶ The total number of goals does not include the goals that were withdrawn.

The breakdown of goals across the five goal categories looks very similar to the data for discharged clients, with the exception of the sizable proportion of goals still “In Progress”.

Figure 10: Goal Achievement Breakdown for the Five Goal Categories, Active Clients in 2014-15 (excludes withdrawn goals)



Some highlights from the active client goal summaries are:

- *Over two-thirds of recorded goals were fully achieved in the following areas (in alphabetical order): “Education”, “Leisure Activities”, “Navigating the Medical System”, “Nutrition/Meal Prep”, “Other Pre-existing or Associated Conditions”, “Other System Navigation”, and “Spirituality”, speaking to our funded agencies’ effectiveness in these areas.*
- Unlike the data for discharged clients, the goal areas with the highest level of non-achievement, with 1 out of 5 goals not being achieved (21% and 20%), were “Initiation”, and “Employment”, respectively.
 - This difference between active and discharged client data is likely due to over one-quarter of employment goals being “in progress” (26%), speaking to the longer term nature of work in this area. Despite this, over one-third of active clients’ employment goals (37%) were recorded as fully achieved.

- Few “Initiation” goals remained in progress (13%). Although 30% of “Initiation” goals were fully achieved and 37% achieved partial success, it is noteworthy that 1 out of 5 “Initiation” goals achieve no success.
- For discharged clients, the goal areas with the poorest achievement were “Addictions” and “Behavior Management”. Although they are within the bottom 10 goal areas for non-achievement for active clients, they do not show the same level of non-achievement as for discharged clients. This could also be due to a high percentage of goals recorded as “in progress”, with 27% for “Addictions” and 23% for “Behaviour Management”.
- *One-quarter or more of goals were recorded as still in progress for numerous areas, perhaps speaking to the longer term nature of work in these areas (in alphabetical order): “Addictions”, “Anger Management”, “Child Rearing/Caregiving”, “Employment”, “Mood Management”, “Navigating the Justice/Legal/Police System”, “Other” – goals not fitting our categories, “Planning/Problem Solving/Self Correction”, “Relationships with Others”, “Self-Awareness/Insight”, and “Stress Management”.*
- The same as for discharged clients, the two goal areas with the highest percentage of withdrawn goals are spirituality (at 31%) and employment (at 25%).

Conclusions

The data for both discharged and active clients show that overall ABI Partnership clients attain achievement on the vast majority of their goals.

Direct Client Service: Evaluation of Individual Programs

The ABI Partnership Project provides funding to 28 programs that provide direct client service to registered clients. For the purposes of this report, these programs can be grouped as follows⁷:

1. Case Management (8 Programs)
2. Day Programming (5 Programs)
3. Independent Living and Residential Programming (5 Programs)
4. Life Enrichment Programming (3 Programs)
5. Children's Programming (1 Program)
6. Vocational Programming (3 Programs)
7. Crisis Programming (2 Programs)
8. Rehabilitation Programming (1 Program)

This section gives a description of each program type along with highlights from their site level evaluations. Programming for education and injury prevention will be outlined in Section Two of this report.

Case Management (8 Programs)

Outreach Teams (3) and ABI Regional Coordinators (5)

The Acquired Brain Injury (ABI) Outreach Teams and ABI Regional Coordinators assist survivors through the reintegration process. *Their mission is to provide individual and family support to people with acquired brain injury so that they may live successfully in their communities with improved quality of life.*

⁷ Program types were altered from previous reports based on program descriptions provided in the site level evaluations. This new grouping is designed to better align with the types of services currently offered by funded programs.

Each of the three ABI Outreach Teams consists of a variety of rehabilitation professionals experienced in the field of ABI. The Outreach Teams work to bridge the gap in service between acute care/rehabilitation and the community, and are responsible for providing services in the following health regions:

- **Sask North (located in Prince Albert):** Prince Albert Parkland, Kelsey Trail, Athabasca, Keewatin Yatthé, Mamawetan Churchill River Health Regions
- **Sask Central (located in Saskatoon):** Saskatoon, Heartland, Prairie North Health Regions
- **Sask South (located in Regina):** Regina Qu'Appelle, Sun Country, Five Hills, Cypress, Sunrise Health Regions



They met me before I was even discharged from the hospital which was great for me to know I had ongoing support after leaving the hospital.

ABI Survivor, Case Management Program

There are five ABI Regional Coordinators located throughout the province who each serve their respective health region:

- Cypress** (located in Swift Current)
- Prairie North** (located in Lloydminster)
- Sun Country** (located in Weyburn)
- Sunrise** (located in Yorkton)
- Five Hills** (located in Moose Jaw)

SERVICE PARTNERS

Referrals for the case management programs typically come from rehabilitation services, acute care, and other health care professionals, other Partnership funded agencies, survivors and their families.

Case Management programs partner with a number of health and other human service professionals to link clients to services and assist them in achieving their goals, as well as educating service providers throughout the service area regarding ABI and its effects.

EDUCATION AND INJURY PREVENTION SERVICES

The ABI Regional Coordinators also engage in injury prevention activities and provide education to target groups in their health region. The Coordinators work to increase awareness in the general public and at-risk populations (children/youth and seniors) around conditions that can cause brain injury. Activities include attendance at community events to educate and raise awareness around topics such as the PARTY program as well as bike, Medical Scooter, ATV and farm safety. Resources have been distributed on bike safety to libraries in several communities, ATV safety information packages sent to schools, and information to promote their program sent to physicians' offices and clinics.

SERVICES

A variety of services are offered by the ABI Partnership's eight case management programs including:

- **Client Case Management/Service Coordination** – ABI survivors and/or their family/natural supporters need a range of services and do not know what services exist or how to access them. Case management programs provide assessment, reassessment, care planning, client reviews, case conferences, service coordination, discipline-specific assessment and treatment and crisis management as required. They also provide, as one ABI coordinator describes it, situation-specific response, including problem-solving and case-specific support around behaviour, employment, etc. Through connections to services, the client or family will receive the supports that meet their needs, facilitating the achievement of optimal levels of functioning for survivors.
- **Linkages to community resources** – Many clients and their families need access to a variety of services including:
 - **The financial system** - Social assistance, Saskatchewan Assured Income for Disability (SAID), Canada Pension Plan disability benefit, Disability tax credit, the banking system, supplementary health prescription coverage, etc.
 - **The medical system** - interpreting medical language, encouraging and/or assisting with booking appointments, placement on waitlists for services, correspondence on client's behalf, determining what services are available (e.g., addictions counselling in the rural areas)
 - **Housing** - accessing and/or applying for housing, rental income supplement, storage in the event of eviction, change of address, etc.

- **Schooling** - assisting in determining available schooling options, applications, accessing academic counsellors, retrieving high school transcripts, connecting with school services (i.e. Special education teachers)
- **Skills** - assisting with money management, (i.e. creating a budget and envelope for receipts), self-care routine, family relationships, etc.
- **Therapeutic Activities** – outpatient therapies (e.g., physical therapy, occupational therapy, speech language therapy, etc.)
- **Leisure/Recreation Services** - such as Wii gaming, coffee group out, bowling, playing cards, doing jigsaw puzzles, crossword puzzles, reading, art and craft classes, musical entertainment, attending plays and cultural events, learning new skills the client is interested in.

These services can be provided through life enrichment programs, day programs, and sometimes independent living programming. These activities can serve as a safe place to practice social skills, and serve to increase clients' quality of life.



*I felt overwhelmed with appointments and life in general.
I felt I was in survival mode.
Getting help with forms was extremely helpful at the time.*

ABI Survivor, Case Management Program



Sometime these connections are achieved by providing assistance and/or education on how to navigate services, and sometimes case managers/regional coordinators are actively engaged in coordinating services according to a realistic "client-centred" rehabilitation plan. For some clients, many community links and connections are needed, whereas for others it may involve very few if any. Sometimes one needs to advocate access to services – this is sometimes done by Case Managers/Regional Coordinators, and sometimes done by clients/families themselves with assistance (education or coaching) from their Case Managers/ Coordinator. The anticipated outcome of linking clients with service is that clients receive the services they need to achieve an optimal level of functioning.

The importance of access to skilled, long-term case management and service coordination support is well documented in the literature and demonstrates the critical need for both survivors and their families met by this type of service [2,3,16,17]. It further supports the Partnership's significant investment in this type of service support.

- **Discipline-Specific Service** – Some case managers/regional coordinators provide direct client services/supports when other services/supports are not available including discipline-specific assessment and treatment conducted by the professional staff (e.g., Nursing, Occupational Therapy, Speech Therapy, Physical Therapy interventions and Supportive Counseling). This also includes group programming such as communication groups, and groups facilitated by recreation therapists such as art groups.
- **Education to Clients and Families** – Many clients and families need and want information regarding the specifics of their brain injury (e.g., area of brain that was damaged, expected impact of damage to that area of the brain) as well as information regarding the general effects of brain injury and management strategies (e.g., fatigue, impact of alcohol on brain function, how to prevent subsequent injuries). Case managers/regional coordinators may directly provide informational resources or provide links or referrals to specialized information depending on client and family need. The result of client and family education is individuals who understand the nature of the injury and its long term impacts (physiological and psychological) on the survivor as well as the effects on those around them. With this knowledge and the passage of time comes a degree of acceptance and adjustment to their new reality.
- **Education for other service providers** – Community partners/service providers who are working with ABI clients (e.g., home care nursing, community health centers, personal care home staff) often require the same education as noted for clients and families above, and in addition, education about how their services might be tailored to best meet the needs of individual clients. The Outreach Teams and Regional Coordinators facilitate education and training of these other human service providers.
- **Support** – This comes in many forms and is all encompassing. The result of support is less uncertainty and anxiety and reduced feelings of going it alone. Its main effect is clients achieving their goals, whether this is returning to school or living independently in their homes.

I remember when I first came to this office. I cried through the whole visit. I hated my life. I hated what had happened to me. Today I am living on my own. I still struggle. Some days I feel like giving up. I know that I can call or drop and ask for help or just talk. I wish things were different. I wish I had a normal life. I know that having the support of the ABI Program has helped me gain and maintain my independence.

ABI Survivor, Case Management Program

- **Support groups** – are facilitated by many case management programs. Often, survivors and families need to connect with others who have had experience with ABI, as well as learn about various brain injury topics through articles, video, discussion, or other methods. Support groups can serve to develop support networks, or a “community” of other survivors and caregivers, and can help improve knowledge and reduce isolation. Sometimes clients will no longer require the assistance of their case manager/coordinator, but will still feel like they have a support network to talk to and a safe place to continue their recovery.
- **Family Support** – This can occur within any of the other areas identified; however, it may also occur on its own, as the client may not be interested in services themselves and/or the family may need additional services on their own.

The ABI program is very valuable & helpful program. In my case, my husband does not wish to be involved, therefore I have very limited involvement. My appointments with ABI coordinator have been very helpful to me. I feel I need to attend support group even if my spouse (who has had the brain injury) refuses to attend.

Family member of ABI survivor

Services may include individual education, psychosocial support, resource referrals, environmental changes or compensatory strategies to support their loved one. Resource linkages may be to the Saskatchewan Brain Injury Association, Support

Groups, counseling agencies, ABI Neuropsychologist in Saskatoon, Stroke Network, etc.

Effectiveness of Family Work...

The North Outreach's survey of family found that all 11 respondents were satisfied with the services that they have received.

However, only 55% of respondents were aware of the ABI resource library and only 73% of respondents indicated that they had received information on community resources that would be of assistance to them and/or their family member. This indicates more attention may be needed in relaying information to families regarding their needs.

- **Client Goal Attainment** – Most importantly, all service provision is directed toward aiding clients to achieve their specified goals. The “re-establishment of roles at home and in the community” has different meaning and is unique to each individual which necessitates that clients be “front and centre” in developing and directing their care plan. Goal-setting is client-driven, and based on SMART goal-setting principles. Some typical examples of goals are:
 - **Return to Work:** This could involve educating employers about the nature and effects of brain injury and helping to develop a return to work plan. It may also involve working with community agencies (e.g., Partners in Employment, Radius) for skills assessment and retraining. Specific activities include job site visits, return to work planning, vocational exploration, job coaching, vocational assessments, accessing community based vocational resources and supported employment opportunities.



I was thrilled by the support I received and also felt very supported as I returned to work. ABI was at my workplace when I returned. She was in my corner and informed others of my injury and helped encourage me.

ABI Survivor, Case Management Program



Effectiveness of Vocational Work...

In a 10 year retrospective case file review on 186 clients (50% being SGI clients), the South Outreach found:

- Well over half (58%) of clients with pre-injury competitive employment maintained or obtained some competitive employment, as well as almost a quarter (22%) of clients that were students at the time of their injury. However, only 5% of clients with no pre-injury employment history went on to obtain competitive employment (1 of the 55 clients). These numbers illustrate the importance of pre-injury employment status as a predictor of employment outcome.
- The case file review also indicated clients with a severe brain injury were two to three times more likely to have a reduction in their employment category.

- **Return to School:** As with work, ABI Outreach involvement may include brain injury education to teachers and staff as well as providing expertise when collaborating to develop an education plan that meets the unique needs of the brain injured client.
- **Support for Independent Living:** This may involve an assessment of independent living skills in the home and community with recommendations and various support options aimed at maximizing client independence. This may involve Occupational Therapy recommendations of structural modifications to the home, memory aids or other cognitive strategies, as well as elements of home care services. It could also involve advocacy and partnering with various agencies such as with Housing Authorities for affordable community housing for individuals with an ABI. It may also involve assisting clients in developing daily living, home making, social, interpersonal, communication and life skills.
- **Re-establish their previous roles and reintegrate into their former lives:** This outcome can be said to have occurred when clients have successfully achieved their goals. It should result in a perception that they have returned as much as possible to their previous roles with improved quality of life.

Effectiveness of Goal Work...

In a survey of the Central ABI Outreach Team's active clients, 93% felt the goal setting process was collaborative, reflecting both their needs and opinions; 93% of clients indicated being successful or somewhat successful in achieving their goals, and at a six month follow-up survey, 88% reported maintaining or somewhat maintaining goals achieved in the program.

FUNDING

Together, the three ABI Outreach Teams and the ABI Regional Coordinators receive 49% of the total ABI Partnership Project budget for a total of almost \$2.6 million in 2014-15 (see Figure 1 on page 13). These programs contributed over \$1.58 million in additional in-kind funding in 2014-15.

Table 14: Partnership funding dedicated to Case Management Programs in the 2014-15 Fiscal Year

Program Component	2014-15 Funding
Outreach Teams	\$2,121,218
Regional Coordinators	\$462,250
Total	\$2,583,468

REGISTRATIONS AND PROGRAM ACTIVITIES

These eight programs provided almost 42,000 services, equaling 31,000 hours of service, to the 1,128 clients registered in their programs (accounting for 63% of the Partnership's total registrations). This averages 27.5 hours of service per registered ABI survivor in the two year period.

Table 15: The Top Five Services Provided by Case Management Programs in 2013-14 and 2014-15

Top 5 Activities with registered survivors (accounting for 73% of service time)	Percent of Total Direct Client Service Time
1. Case Management	32%
2. Administration	12%
3. Recreation & Leisure Activities	11%
4. Psycho-Social Services	9%
5. Discipline Specific Therapy	9%

EFFECTIVENESS OF CASE MANAGEMENT PROGRAMS - HIGHLIGHTS FROM SITE LEVEL EVALUATIONS

Surveying of community partner satisfaction was conducted by all three outreach teams and two ABI Regional Coordinators. The results of all surveys were very positive.

Not accounting for surveys forwarded by recipients to other service providers, there was a response rate of 35% on the original list of contacts for the ABI Outreach Team surveys:

- 48 from the South Team (40 had worked with the team, 8 had not)
- 28 from the Central Team (26 had worked with the team, 2 had not)
- 23 from the North Team (22 had worked with the team, 1 had not)

Provincial results are given on the next page. All scores except one (indicated in red) fell between 4 (Mostly) and 5 (Very Much), indicating a high level of satisfaction with the teams. The only score that fell below this was regarding communication on client progress, and it was acknowledged by Outreach Team managers that this should be an area for future improvement.

Figure 11: Results of the ABI Outreach Teams' Community Partner Survey

QUESTIONS	Central Outreach n = 28	North ABI Services n = 23	South Outreach n = 48	Average Across Teams	Average Across Outreach Programs in 2006 n = 76	Change from 2006 results
QUESTION 3: DO YOU FEEL THAT THESE EXPECTATIONS HAVE BEEN MET?	4.1	4.1	4.3	4.2	4.2	No Change
QUESTION 4: DO YOU FEEL THAT THE ABI OUTREACH TEAM WAS RECEPTIVE TO YOUR REQUESTS FOR SERVICES?	4.2	4.3	4.6	4.4	4.4	No Change
QUESTION 5: DO YOU FEEL THAT THE ABI STAFF COLLABORATED WELL WITH YOU OR MEMBERS OF YOUR ORGANIZATION?	4.2	4.2	4.4	4.3	4.5	-0.2
QUESTION 6: HOW HELPFUL DID YOU FIND THE STAFF WHEN IT CAME TO UNDERSTANDING AND ATTENDING TO YOUR REQUESTS?	4.3	4.2	4.5	4.3	4.5	-0.2
QUESTION 7: HOW HELPFUL DID YOU FIND THE STAFF WHEN IT CAME TO UNDERSTANDING AND ATTENDING TO THE NEEDS OF YOUR CLIENT(S)?	4.1	4.1	4.4	4.2	4.4	-0.2
QUESTION 8: TO WHAT DEGREE DO YOU THINK YOUR CLIENT(S) BENEFITED FROM HIS/HER PARTICIPATION WITH THE ABI OUTREACH TEAM?	4.3	4.3	4.2	4.3	4.4	-0.1
QUESTION 9: WERE YOU SATISFIED WITH HOW YOU WERE KEPT INFORMED ABOUT YOUR CLIENT(S') PROGRESS?	4.0	3.7	4.0	3.9	4.1	-0.1
QUESTION 10: WERE YOU SATISFIED WITH THE QUALITY OF SERVICE RECEIVED BY YOUR CLIENT(S)?	4.1	4.1	4.3	4.2	4.3	-0.2
QUESTION 11: DID WE HELP YOUR CLIENT(S)?	4.0	4.1	4.1	4.1	4.4	-0.3
QUESTION 12: GIVEN YOUR OVERALL SATISFACTION, WOULD YOU COLLABORATE AGAIN WITH FUTURE CLIENTS?	4.5	4.4	4.6	4.5	4.7	-0.2
AVERAGE ACROSS QUESTIONS	4.2	4.1	4.3	4.23	4.38	-0.2

The community partners of ABI Regional Coordinators also showed a high level of satisfaction. In one survey, responses were received from 16 partners (89% response rate), and results indicated a high degree of satisfaction with service coordination (referral, support and follow-up). In another survey, responses were received from 9 partners (50% response rate). All respondents to this survey indicated that they would collaborate again with the ABI coordinator with future clients (44% very much agreed, 11% mostly agreed and 44% somewhat agreed), and that the coordinator was helpful when it came to meeting the needs of their clients (33% very much agreed, 44% mostly agreed and 22% somewhat agreed). Similar to Outreach Team results, this survey indicated lower satisfaction for communication about client progress (11% indicated “do not agree at all” to being satisfied with how they were kept informed about their client’s progress).

Quotes presented in site level evaluation regarding collaboration with case management services include:

- *We find that [ABI Coordinator] has been a great partner and hugely beneficial support to clients that we both serve. [ABI Coordinator] has been very good to work with, with clients but also great support to our staff in providing knowledge about ABI or the strategies to best support certain clients. Very valuable in the community.*
- *Requests for contact are always met in a timely fashion. Staff have answered questions with significant knowledge and wisdom gained through years of experience.*
- *Clients that do not have ABI Workers do not experience the same quality of life as they are lost without the assistance and caring that the ABI Workers that I have known have provided to my clients.*

Quotes from case management clients include:

- *I am appreciative that the ABI service is here and accessible. I have had a complete recovery and I am aware of the outreach team if I should need it in the future.*
- *The support and encouragement I received surpassed my expectations.*
- *I consider my recovery due to ABI. Their view and treatment of me as a person helped immensely.*
- *I appreciated the respectful and compassionate way in which my family and I were treated. I'm pleased that a service like this exists especially when it's easy to forget about people once they leave the hospital.*
- *My brain injury poses many challenges and getting better has been a struggle that has required a lot of help. The ABI Team was a big part of this as they gave me hope and encouragement. I continue to take things one day at a time and things are now feeling more manageable.*

Day Programming (5 Programs)

SARBI (Saskatoon, Regina, and Kelvington), LABIS (Lloydminster) and Sherbrooke Community Center “Moving On” (Saskatoon)

Following brain injury, ABI survivors often need to relearn social and community skills. They are often socially isolated and require a program that will motivate them to leave home. Social participation has been documented in the literature [18] as an important means to enhance survivors’ quality of life – a primary goal of the ABI Partnership. All of the day programs funded by the ABI Partnership provide a welcoming, structured environment where survivors of ABI can work together to reach their goals, although each program is structured slightly differently. In addition to leisure, physical activities, and psychosocial skills, the Sherbrooke and East Central SARBI programs also focus on life skills such as meal planning, preparation and clean-up skills, and East Central SARBI carries out therapy plans (speech language, physical therapy).

The goal of all day programs is increased skills in the areas of communication, interpersonal relations, and interacting with the greater community, meal planning and preparation for Sherbrooke and East Central SARBI, money management for Sherbrooke, and functional mobility for East Central SARBI.

“I can see the improvement in my spouse since he has started coming to SARBI”

“I like the family atmosphere, it makes me feel very comfortable.”

SARBI clients

OVERALL FUNDING

Together, the five day programs receive 7% of the total ABI Partnership Project budget for a total of over \$350 thousand in 2014-15 (see Figure 1 on page 13). These programs contributed over \$483 thousand in additional in-kind funding.

REGISTRATIONS AND PROGRAM ACTIVITIES

The five day programs provided over 13,000 services, equaling over 37,000 hours of service, to the 124 clients registered in their program (accounting for 7% of the

Partnership's total registrations). This averages 302 hours of service per registered ABI survivor in the two year period. Top activities are shown in Table 16.

Table 16: The Top Five Services Provided by Day Programs in 2013-14 and 2014-15

Top 5 Activities with registered survivors (accounting for 98% of service time)	Percent of Total Direct Client Service Time
1. Psycho-Social Services	46%
2. Discipline Specific Therapy	28%
3. Recreation & Leisure Activities	12%
4. Case Management	9%
5. Life Skills Training	3%

EFFECTIVENESS OF DAY PROGRAMS - HIGHLIGHTS FROM SITE LEVEL EVALUATIONS

- All respondents to EC SARBI's survey indicated that their goals were moving them in the right direction.
- Saskatoon SARBI's survey of clients revealed that two-thirds of clients feel more comfortable in social settings than prior to SARBI attendance and have noticed an improvement in memory, and 78% felt that the SARBI program has helped improve relationships with friends and family, and that participation has increased their self-esteem.
- Regina SARBI's survey of clients revealed that 71% of SARBI clients feel more comfortable in social settings than prior to SARBI attendance; 42% of SARBI clients noticed an improvement in memory than prior to SARBI; 79% of SARBI clients state that the SARBI program has helped improve relationship with friends and family; and 86% of SARBI clients felt that SARBI participation increased their self-esteem.
- Joint survey results of LABIS clients and their family/caregivers indicated that they were making improvements on their independence, stress management, memory recall, communication skills, and social skills.
- All five of Sherbrooke's assessed clients showed improvement in their overall score on the Leisure Competency Measure. In addition, 100% of Sherbrooke's family members surveyed stated that the program was an enjoyable experience for their loved one with ABI, with 64% identifying socialization, creating a new peer group

and meeting new people as beneficial. For “What changes did you notice?”, 64% of families surveyed felt their loved one improved in communication and socialization, 27% observed improved confidence, positive interactions and decreased anger, and 14% witnessed increased independence. Other comments of note were that they became more aware of their own abilities and they would not be where they are today without the Moving On program.

Independent Living and Residential Programming (5 Programs)

Sask North Independent Living (Prince Albert), SMILE Services (Estevan), SIGN (Yorkton) and Thunder Creek Rehabilitation (Moose Jaw), and 1 Residential Program: Pearl Manor, Phoenix Residential Society (Regina)⁸

Following brain injury, many ABI survivors require assistance with housing and placement options, as well as development and maintenance of independent living skills (e.g., budgeting, cooking, Activities of Daily Living) to live independently in their own homes. Independent living programs also strive to improve community integration and quality of life. Some of these programs work to increase stability in terms of physical and mental health, and many also provide assistance in rehabilitation treatment plans.

This program is my lifeline.

The Independent Living Programs provide such services as: life skills, rehabilitation, recreational activities, and a/vocational support. PEARL Manor is the only funded residential program and is a provincial resource, although PEARL also provides supported living services.

Independent Living Client

The goal of all five programs is to enable individuals with ABI to live more independently in the community with improved quality of life by assisting in the restoration of as much functional ability as possible.

⁸ Note: three independent living programs did not submit site-level evaluations but instead provided earlier, tailored evaluative information, leaving only 2 site level evaluations for this section.

OVERALL FUNDING

Together, the five independent living and residential programs receive 17% of the total ABI Partnership Project budget for a total of over \$865 thousand in 2014-15 (see Figure 1 on page 13). These programs contributed over \$283 thousand in additional in-kind funding.

PROGRAM ACTIVITIES AND REGISTRATIONS

The five Independent Living and Residential Programs provided over 26,000 services, equaling over 19,000 hours of service, to the 142 clients registered in their program (accounting for 8% of the Partnership's total registrations). This averages 136 hours of service per registered ABI survivor in the two year period. Top activities are shown in Table 17.

Table 17: The Top Five Services Provided by Independent Living and Residential Programs in 2013-14 and 2014-15

Top 5 Activities with registered survivors (accounting for 79% of service time)	Percent of Total Direct Client Service Time
1. Recreation & Leisure Activities	27%
2. Psycho-Social Services	20%
3. Life Skills Training	16%
4. Discipline Specific Therapy	9%
5. Case Management	7%

EFFECTIVENESS OF INDEPENDENT LIVING AND RESIDENTIAL PROGRAMMING - HIGHLIGHTS FROM SITE LEVEL EVALUATIONS

- Results from client and family satisfaction surveys of PEARL clients (28 clients, 8 family members) indicate a high level of service satisfaction, with 23 of the 28 clients rating service satisfaction as 'very satisfied' or 'excellent' (82%). Family results indicate that all families see the services their loved one with ABI is receiving as 'excellent' (50%) or 'very satisfactory' (also 50%).
- Overall satisfaction and effectiveness of psychosocial programming in Prince Albert was evaluated. Respondents benefitted from the programs in a number of ways including physical benefits, having a place to practice social skills and express emotions, as well as improvements indicated in their self-esteem.
- LiSat results indicated that majority of PA Independent Living clients were 'rather' to 'very satisfied' in all life areas measured.

Client quotes obtained from Residential and Independent Living clients through the site level evaluations' surveys also show the value of these programs:

- *"You showed me that I can learn new skills, like riding the bus, and that I can find friends and support."*
- *"I'm more financially independent, more physically fit from gym and yoga"*
- *"I learned to cook and clean. Went to classes to learn to work"*
- *"I've gained the ability to walk again, improved money management and (staff) assisted with helping me gain the skills of daily living"*
- *"[IL] worker is the greatest person I have ever met. She helps everyone, [IL worker] gave me my life back."*

Life Enrichment Programming (3 Programs)

Saskatchewan Abilities Council: Saskatoon, Regina and Yorkton branches

These programs promote and facilitate personal and social rehabilitation, through recreation and leisure activities for those that may or may not be capable of returning to the competitive workforce. Based on client interests, activities are organized individually or for a group. These programs assist clients in developing social skills, as well as exposing clients to new experiences.



I would probably just sit at home. The program is good for me because we go out and might meet new people, or get reconnected with old friends – it wouldn't be good without it.

From a Life Enrichment Client



ABI Life Enrichment programs assist persons with an ABI to make social, recreational and leisure connections to the community thus enhancing their overall quality of life, increasing community integration, and reducing social isolation.

OVERALL FUNDING

Together, the three “Life Enrichment Programs” receive 3% of the total ABI Partnership Project budget for a total over \$140 thousand in 2014-15 (see Figure 1 on page 13). These programs contributed over \$108 thousand in additional in-kind funding.

PROGRAM ACTIVITIES AND REGISTRATIONS

The three Life Enrichment Programs provided over 7,000 services, equaling over 18,500 hours of service, to the 138 clients registered in their program (accounting for 8% of the Partnership’s total registrations). This averages 135 hours of service per registered ABI survivor in the two year period. Top activities are shown in Table 18.

Table 18: The Top Five Services Provided by Life Enrichment Programs in 2013-14 and 2014-15

Top 5 Activities with registered survivors (accounting for 98% of service time)	Percent of Total Direct Client Service Time
1. Discipline Specific Therapy	44%
2. Recreation & Leisure Activities	30%
3. Service Provided to Families	16%
4. Case Management	5%
5. Administration	4%

EFFECTIVENESS OF LIFE ENRICHMENT PROGRAMMING - HIGHLIGHTS FROM SITE LEVEL EVALUATIONS

- Saskatoon’s client and family/supporter questionnaire indicates:
 - the program is client centered, and has increased clients’ awareness of community, reintegration, and independence.
 - Benefits to family - all family/supports indicated that the program provided them respite, benefited their loved one, and reduced their stress level (indicated by 62% of family/supports).
- Regina’s Quality of Life Assessment Interview indicated:
 - All new clients, and 92% of existing clients, indicated that they saw a decrease in the number of barriers to their enjoyment, and the same number indicated that they saw an increase in their quality of life satisfaction.
 - All new and existing clients indicated that, “Because they participated in the Quality of Life Program...” they felt good while participating in

programs, the activities were meaningful to them, they have people they can depend on, feel like they belong in their community, can manage everyday activities, have activities they are interested in, **and feel like their quality of life has improved by being part of the Quality of Life Program.**

- Yorkton's Interview of clients indicated that:
 - Clients engaged in various community based activities including life skills (time management, cooking, making decisions, coping strategies), walking, gardening, cooking, bowling, etc.
 - When asked "have you gained everything you wanted to from the services received...?", 12 out of 13 individuals stated "yes," - a 92% satisfaction rate. Examples/themes from the interviews were very positive including: having a sounding board, someone to talk to, felt less alone, facilitated friendships (old and new), more exercise led to better health.
 - In addition, families appreciated support groups and positive changes in their loved ones.

Client quotes obtained from ABI Life Enrichment clients through the site level evaluations' surveys also show the value of these programs:

- *"I enjoy all the outings I go on."*
- *"I am now capable of doing things myself. I am getting out and being with more people."*
- *"It was always reassuring to know there was somebody who was available to help, even if it was only for emotional support or somebody with a new perspective on how to accomplish a task. I never realized there was people who gave encouragement and help so selflessly."*
- *"It was great when you helped me with the buses. I loved going to picnics and walks and bike rides. I would be sad if I didn't have it, because there would be nothing."*
- *"I feel like it's (QOL) improving every time. It's when I get out there and meet more people and see them it makes me feel better. If you are home, you feel dull, and when you get out there and meet more people it lifts you up and gets you excited. They've gone through the same experience you have gone through, so you don't really have to feel dumb".*
- *"I enjoyed everything, I learned going to the gym and I will keep going and hope to do other things".*
- *"[LE Facilitator] has been a very supportive person in all of my ventures, and supporting me through recreation activities."*

Children's programming (1 Program)

Radius (Saskatoon)

Radius Community Centre, located in Saskatoon is the only program within the Partnership that offers programming exclusively for children and adolescents. The goal of Radius' Community Integration Program is to facilitate age-appropriate integration opportunities for children and youth with acquired brain injury in their own community.

The core program goals strive to ...

- improve community participation of children and youth with an ABI by developing and implementing an individual Community Integration Plan
- provide support to the participant's family to help integrate the participant with the community
- assist community integration by linking participants to existing community resources in their home communities
- advocate on behalf of participants to help reduce barriers and improve community participation



"I really enjoy the time with my worker, we do fun things."

Radius Client



OVERALL FUNDING

The children's program receives 2% of the total ABI Partnership Project budget for a total over \$125 thousand in 2014-15 (see Figure 1 on page 13). This program contributed over \$9 thousand in additional in-kind funding.

PROGRAM ACTIVITIES AND REGISTRATIONS

Radius provided over 875 services, equaling over 2,000 hours of service, to the 19 clients registered in their program (accounting for 1% of the Partnership's total registrations). This averages 115 hours of service per registered ABI survivor in the two year period. Top activities are shown in Table 19.

Table 19: The Top Five Services Provided by Children's programs in 2013-14 and 2014-15

Top 5 Activities with registered survivors (accounting for 97% of service time)	Percent of Total Direct Client Service Time
1. Recreation & Leisure Activities	59%
2. Discipline Specific Therapy	17%
3. Camp Event - Client	15%
4. Case Management	4%
5. Administration	2%

EFFECTIVENESS OF CHILDREN'S PROGRAMMING- HIGHLIGHTS FROM SITE LEVEL EVALUATIONS

Enhancements have included additional supports for parent and youth education; assessments and follow-up; and a focus on milestones for youth development. The goal of this service continues to be to help families have fun and work towards creative actions that improve quality of life and lead to work-life balance.

Radius piloted a new tool, the 40 Developmental Assets Tool, which elicits positive experiences and qualities to promote positive behaviors and attitudes in youth, while at the same time protecting them from taking part in at-risk behaviors. When setting goals many families pick very big goals to work on that seem right at the time but are hard to achieve or not specific enough. The 40 Developmental Assets tool has provided a great platform to direct conversation and energy towards areas to focus on, and provide youth and families with a good visual so that they could see areas of need and success. The tool will be further implemented and used in conjunction with client and family education regarding setting of SMART goals.

Quotes from Radius' families also demonstrate the effectiveness of programming:

- *"Thank you for being part of our life.....my daughter appreciates it."*
- *"We appreciate you coming to the school and attending the meeting with me.....I find them very stressful."*

Families who attended Radius' Parent Knowledge Exchange were also very positive:

- *"Just to hear from everyone what's going on, and to hear the topics. And then when I came back [home], 'Oh that was great!' You felt renewed."*
- *"To meet other parents who are in the same boat as I am, and to know that there's someone else who totally understands what the stresses are."*
- *"It was the social aspect to get in touch with other parents who have kids with ABI and seeing what other resources are out there."*

Vocational programming (3 Programs)

SK Abilities Council (Saskatoon and Regina), Multiworks (Meadow Lake)

Partners in Employment (PIE), a program of the Saskatchewan Abilities Council, in Regina and Saskatoon, along with Multiworks in Meadow Lake provide individualized support and training/rehabilitation to individuals with ABI who are interested in obtaining or maintaining employment. The goal of these vocational programs is to improve the quality of life of survivors by enhancing community integration and increasing functional productivity.

For PIE programs, typical work includes developing a vocational plan and providing vocational services based on identified goals that reduce barriers to employment and lead to community-based employment. Examples include: work readiness (skill development), individualized job search training, resource centre access, pre-employment placing, job development, job match, employment, job accommodation. They also provide employment supports that assist clients with maintaining their employment. Support includes job coaching, regular follow-up meetings with client and/or their employer, and sharing information regarding ABI with employers and their staff.

Multiworks facilitates a mix of vocational, life enrichment, and quality of life goals.

OVERALL FUNDING

Together, the three “Vocational Programs” receive 4% of the total ABI Partnership Project budget for a total over \$205 thousand in 2014-15 (see Figure 1 on page 13). These programs contributed over \$165 thousand in additional in-kind funding.

PROGRAM ACTIVITIES AND REGISTRATIONS

The three vocational programs provided over 6,500 services, equaling over 12,000 hours of service, to the 164 clients registered in their program (accounting for 9% of the Partnership’s total registrations). This averages 75 hours of service per registered ABI survivor in the two year period.⁹ Top activities are shown in Table 20.

⁹ This data is skewed by Multiworks which offers very intensive service to three registered clients.

Table 20: The Top Five Services Provided by Vocational programs in 2013-14 and 2014-15

Top 5 Activities with registered survivors (accounting for 100% of service time)	Percent of Total Direct Client Service Time
1. Life Skills Training	71%
2. Vocational Services - Client	20%
3. Administration	7%
4. Consultation/Education/Training	2%
5. Service Provided to Families	0.1%

EFFECTIVENESS OF ABI VOCATIONAL PROGRAMMING - HIGHLIGHTS FROM SITE LEVEL EVALUATIONS

- Results from Saskatoon PIE's evaluation were very positive and show that clients are being assisted to obtain and maintain employment (40% of the entire caseload, 62% of clients in active job search were employed). Additionally, results suggest programming is client-centered, with 93% of clients engaged in their individualized plan, that clients learn which services/tools can help them, that communication with employers is good, that PIE gets clients closer to their employment goals, and that PIE helps manage barriers for clients.
- Results from Regina PIE's evaluation were positive, with all clients who became employed (8 of 16 clients) passing their probation period, and of those clients, hours of support decreased by 80% between the first month and fourth month of employment, indicating clients are building independence at work.
- Multiworks provided case studies illustrating how their program works with their clients to maintain or improve their vocational and independent living skills.

Quotes from clients of ABI Vocational programs also demonstrate the effectiveness of programming:

- *"It has given me a sense of worth and optimism. The staff provide me with an outlet for problem solving and support."*
- *"They took the fear away; they were encouraging, supporting, and understanding. It was a great place to be, a good environment and I am grateful."*
- *"They believe in people. Everyone has been really great and no one judges me."*

- “*I have hope since working with Partners in Employment*”

Crisis programming (2 Programs)

Saskatoon Crisis Intervention Services (Saskatoon), Mobile Crisis (Regina)

Mobile Crisis Services located in Regina and Crisis Intervention Services located in Saskatoon, both provide crisis management services for survivors of ABI. These programs provide case management services when mainstream services have been unsuccessful. They also provide crisis intervention services accessible 24 hours, 365 days of the year.

These programs are designed to serve those described as non-compliant, hard to serve, or difficult to manage. They experience chronic crisis and instability, often leading to unmet physical, mental, psychosocial or basic needs. These clients are often not receiving appropriate services as the services may be unavailable, inaccessible, inappropriate or have been refused to the client.

These programs work to stabilize the ABI client’s immediate condition (e.g., medical and/or psychiatric interventions, emergency housing, and financial help), and provide intensive/pro-active case management to ensure their safety in the community and enable the client to pursue as much independence as they are able to manage. They work with the client to identify their needs; meet with the client, collaterals, and other agencies to advocate and/or obtain resources and services for that client; develop appropriate plans for the client and then regularly meet with them to facilitate follow-through.

Crisis programs engage in aggressive outreach as the preferred intervention type (experiential learning out in the community). The case manager – client relationship is both primary and essential. This model involves hands-on coaching, mentoring, exploring (the community), and connecting. Programs do regular work to support day-to-day needs such as budgeting, paying bills, groceries, appointments, practicing social skills, and in the case of justice system involvement, working with the client and other agencies, such as Parole Officers, to ensure that the client follows conditions and does not compound current legal issues. Crisis Intervention Services in Saskatoon also provides financial trusteeship.

The ultimate goal of these programs is to reduce crisis behavior, enhance client functioning, and achieve progress on service plan goals, for example, to maintain housing, be able to budget, actively engage in appropriate treatments, reduce mental health risk behaviour, substance overuse, aggressive behaviour, justice system

involvement, maintain stable basic needs such as shelter, food, clothing, health care, and other goals.

OVERALL FUNDING

Together, the two “Crisis Programs” receive 2% of the total ABI Partnership Project budget for a total over \$110 thousand in 2014-15 (see Figure 1 on page 13). These programs contributed over \$108 thousand in additional in-kind funding.

PROGRAM ACTIVITIES AND REGISTRATIONS

The two Crisis programs provided over 2,500 services, equaling over 1,700 hours of service, to the 35 clients registered in their program (accounting for 2% of the Partnership’s total registrations). This averages 51 hours of service per registered ABI survivor in the two year period. Top activities are shown in Table 21.

Table 21: The Top Five Services Provided by Crisis programs in 2013-14 and 2014-15

Top 5 Activities with registered survivors (accounting for 97% of service time)	Percent of Total Direct Client Service Time
Case Management	88%
Administration	3%
Psycho-Social Services	3%
Life Skills Training	2%
Residential Services	1%

EFFECTIVENESS OF CRISIS PROGRAMMING - HIGHLIGHTS FROM SITE LEVEL EVALUATIONS

- Saskatoon Crisis completed five case studies to highlight their clients’ situations and need for crisis service, the work done with clients by the program, and some of the client gains made.
- Data collected by Regina’s Mobile Crisis highlights this population’s propensity for ongoing crisis. When the caseworker addressed one ongoing crisis, another ongoing crisis in another needs area would become priority. However, the ABI program does ensure clients are safe and basic needs are being met. This was identified as a significant need area based on the 225 contacts the case worker had over 2 months. Other results of note include:
 - Most frequent needs addressed are addictions, cognitive, “food, clothing and personal”, housing and relationships. Over 75% of the 1,224

contacts that the case worker had directly or indirectly with client were in these 5 need areas.

- Approximately 40% of ABI clients experienced a new crisis during the 6 months of data collection, and 73% of clients were involved in an ongoing crisis in one of the need areas.
- Caseworker had 225 direct contacts that addressed issues with basic needs. That represented 42% of the clients.
- Due to the nature of their disability(s), most clients may only achieve incremental improvements in their abilities. Ongoing case management will be essential for most “difficult-to-manage” ABI clients.

Rehabilitation Programming (1 Program)

Speech Language Pathology (SLP) services (Melfort)

Prior to 1997, there was no adult Speech Language Pathology (SLP) service for ABI survivors in the Kelsey Trail Health Region. The program was designed to provide individualized services to those who have speech, language, swallowing, and/or cognitive difficulties as a result of an acquired brain injury. This program works with ABI survivors (and their families) who have motor speech difficulties; language difficulties including auditory comprehension, reading comprehension, verbal expression and written language; swallowing difficulties, and/or cognitive issues.

OVERALL FUNDING

The SLP position in Kelsey Trail receives 1% of the total ABI Partnership Project budget for a total over \$45,000 in 2014-15 (see Figure 1 on page 13). This program contributed almost five thousand dollars in additional in-kind funding.

PROGRAM ACTIVITIES AND REGISTRATIONS

The SLP program provided over 440 services, equaling over 280 hours of service, to the 44 clients registered in the program in 2013-14 and 2014-15 (accounting for 2% of the Partnership’s total registrations). This averages 6.5 hours of service per registered ABI survivor. Top activities are shown in Table 22.

Table 22: The Top Five Services Provided by Crisis programs in 2013-14 and 2014-15

Top 5 Activities with registered survivors (accounting for 99% of service time)	Percent of Total Direct Client Service Time
1. Discipline Specific Therapy	40%
2. Administration	22%
3. Case Management	21%
4. Cognitive Interventions/Training	15%
5. Consultation/Education/Training	2%

EFFECTIVENESS OF REHABILITATION (SLP) PROGRAMMING - HIGHLIGHTS FROM SITE LEVEL EVALUATIONS

- As part of the 2013-16 contract period, the Kelsey Trail SLP program conducted an evaluation with baseline compared to follow-up assessments. Results showed that clients were making progress on their therapy goals and were improving their function in the areas of memory (with facilitation tools), safe swallowing/eating and communication.
- An examination of goal attainment data suggested that achievement is influenced by the number of therapy sessions, client motivation, family support, the degree of their injury and other complicating medical conditions.

SECTION 2: EDUCATION AND INJURY PREVENTION SERVICES

In Canada, as in many countries around the world, injuries, intentional and unintentional, have been one of the leading causes of death, particularly among people between the ages of 1 and 44 years. At the same time, injuries are considered one of the most preventable health problems, with 90% of injuries estimated as preventable [19].

Saskatchewan has traditionally been one of the provinces most impacted by injury. In 2010, injury cost residents of Saskatchewan \$1.1 billion and led to 690 deaths. In the same year injuries left 2,292 people permanently partially or totally disabled, led to 10,844 hospitalizations and prompted 110,312 emergency room visits. With a 2010

population of 1,051,425 the death rate due to injury in 2010 was 66, approximately 9,953 potential years of life were lost per 100,000 people and injuries cost each resident of Saskatchewan \$1,108 [20].

In Saskatchewan more than a quarter of total costs arose from fall injuries (29%) and injuries due to transport incidents (22%). Total costs also accumulated due to other unintentional injuries (23%), suicide or self-harm (10%), violence (6%), unintentional poisoning (6%), fire and burns (2%), injuries of undetermined intent (2%), and being struck by or against sports equipment (1%) [20].

The two leading causes of injury-related death in Saskatchewan in 2010 were falls (25%) and transport incidents (23%). Other causes of death due to injury included suicide and self-harm (19%), other unintentional injuries (12%), unintentional poisoning (11%), violence (4%), drowning (3%), fires or burns (1%), and other injuries of undetermined intent (1%) [20].

Injuries do not affect only the injured; they affect families, jobs, income, school attendance and the general economy of the province. The ABI Project has supported injury prevention from the beginning with dedicated dollars going toward programs and communities. The only cure for a brain injury is prevention.

Education and Prevention: Provincial Overview

The Partnership funds a Provincial ABI Education and Prevention Coordinator position that operates as part of the ABI Provincial Office, as well as five Education and Prevention programs. Descriptions of the programs follow:

- The Provincial ABI Education and Prevention Coordinator (included in the funding chart under provincial coordination rather than education and prevention) works with regional health authorities, community agencies, survivors, and family members throughout Saskatchewan by coordinating prevention, education and research activities related to ABI.
- Three Education and Prevention Regional Coordinator positions deliver services to the south service area (1 position), the central service area (1 position), and to the north service area (2 positions during this contract period) – see provincial service map on page 14 that demarcates the service areas by color: blue (south), yellow (central) and green (north).

- The Saskatchewan Prevention Institute (SPI) is a provincial non-profit organization located in Saskatoon that is funded to raise awareness and deliver education about the prevention of acquired brain injury in children. Injury prevention interventions include education, legislation, and engineering approaches.
- The Saskatchewan Brain Injury Association is a provincial organization with staff in Moose Jaw, Saskatoon, and Regina, whose funded education activities are more focused on survivor and families. This agency provides information, service advocacy, support and guidance for ABI survivors and their families. Major activities include: three major retreats held around the province (spring, summer and fall); local SBIA Chapter support group events (support groups, walking groups, facilitated drumming sessions, holiday celebrations and lunch n' learn days); a Provincial Toll Free Support Line; and website and quarterly newsletters.

OVERALL FUNDING & ACTIVITIES

The funded Education and Prevention programs received 10% of the total ABI Partnership Project budget for a total over \$510 thousand in 2014-15 (see Figure 1 on page 13). These programs contributed over \$1.06 million in additional in-kind funding in the same fiscal year.

In 2013-14 and 2014-15, these five funded programs recorded a total of 15,000 hours of service with over 25,000 attendees at Education and Prevention Events (which excludes program preparation, coordination, and community development).¹⁰

The next section of this report will describe the activities of the education and prevention programs¹¹. Together these programs work to educate communities about brain injury and the efforts that can be made towards preventing them.

¹⁰ Including other funding agencies, over 18,000 hours of education and prevention service was recorded – with almost 28,000 attendees at Education and Prevention Events (which excludes program preparation, coordination, and community development).

¹¹ This includes the work of an additional contracted position in Prince Albert Parkland Health Region who facilitated many provincial initiatives in this contract period.

Provincial Education and Prevention Initiatives

In August of 1996, a Provincial ABI Education and Prevention Coordinator position was awarded to the former Moose Jaw Thunder Creek Health District, and this position operates as part of the ABI Provincial Office. The original document developed to guide the Acquired Brain Injury (ABI) Project, [5] called for the appointment of an educational, injury prevention and research person for the province.

The primary role of this position is to coordinate prevention, education and research activities related to ABI with regional health authorities, community agencies, survivors, and family members throughout Saskatchewan. In addition to provincial activities, the Provincial Coordinator sits on several national working committees. These include two Canadian Standards Association Technical Committees, Provincial (Saskatchewan) Lead for the Canadian Falls Prevention Curriculum, and the Canadian Collaborating Centres on Injury Prevention Committee. This position coordinates the ABI Partnership Project's annual conference, Brain Trust, co-chairs the Traffic Safety and Injury Prevention Community Grants program in partnership with SGI (described in a following section), and coordinates other provincial education initiatives that receive funding through the ABI Partnership Project. These initiatives are described in the sections that follow.

Website

On April 1st, 2010, the Acquired Brain Injury Partnership Project website was unveiled: www.abipartnership.sk.ca. The purpose of the website was to improve the publicity of the Partnership Project and to provide more timely access to information and resources. The website was upgraded in the summer of 2014 to improve ease of navigation, and better organization of content. There were also many additions to the website made in 2014 and 2015 including: the new Introduction to ABI online series, updated content for concussions, links, and video content.

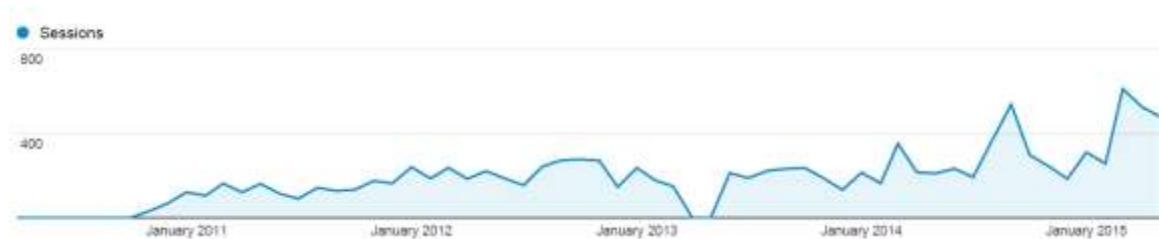
Saskatchewan resources have improved with the update of this website.

- Website Visitor

The following website usage statistics were derived from Google Analytics (report run on June 5, 2015). These statistics filter out all visits made to the website by the

Saskatchewan Ministry of Health.¹²

Figure 12: Website Analytics (from Google Analytics) depicting pageviews per month, April 1 2010 to May 31, 2015



To date, there have been almost 8,000 individual users to the website that have had at least one session since the website was launched. In just the last fiscal year, 2014-15, there were 2,428 individual users to the website. Sixty-five percent of these were new visitors, and 35% were returning visitors. This is encouraging as it shows the website is attracting new visitors, but it also is being revisited by previous users indicating its usefulness.

Data from Google Analytics suggest that the increase in web traffic may partially be due to the launch of *Introduction to ABI Online Series*, described in detail in the next section. In the year after its launch (August 1, 2014 to July 30, 2015), the *Introduction to ABI Online Series* homepage was the second most frequently viewed page, only after the website homepage, accounting for 8% of all website page views. Additionally during this period, the largest proportion of clicks on the website homepage was to the *Introduction to ABI Online Series*, accounting for over a quarter (13%) of all clicks made on the homepage. In light of this data, it would seem that the *Introduction to ABI Online Series* is a valuable addition to our website, and is getting some attention from our website viewers.

Introduction to ABI

The Provincial Education and Prevention Coordinator, in partnership with various Partnership staff, historically had provided an introductory course on the basics of ABI that would occur every 12 to 18 months. Originally this course was made available to

¹² This is to filter out visits that may have occurred by the ABI Provincial Office in order to update the website.

orient new staff of the Partnership and meant to provide introductory information. Over time training seats expanded to include professionals and individuals from other sectors.

Meanwhile it was identified that in order to address vast geographical distances and timeliness of content delivery, more accessible methods of education and training were needed in the North and provincially. As a way of strengthening service delivery in the North, a position was created in PA Parkland Health Region to develop such training, and to look at such possibilities as telehealth. After investigating methods, it was decided to create an online version of *Intro to ABI* through powerpoint presentations created and narrated by front-line Outreach Team staff, who all have significant experience in their topic areas and in working with ABI survivors.

These training presentations are available on the ABI Partnership Project's website: www.abipartnership.sk.ca. The list of topics is more comprehensive than in the original *Intro to ABI* courses. Additionally, the presentations can be viewed at any time by anyone who has an internet connection and the ability to watch YouTube videos.

The list of topics includes:

1. Intro to ABI: Brain and Brain Injury - Dr. Bryan Acton, Registered Psychologist
2. Intro to ABI: Recovery and Measurement - Dr. Bryan Acton, Registered Psychologist
3. Intro to ABI: Behavioral Interventions - Dr. Bryan Acton, Registered Psychologist
4. Cognition in ABI - Gwen Windsor, Occupational Therapist
5. Communication after ABI - Allison Kotrla, Speech Language Pathologist
6. Community Rehabilitation Principles in ABI - Gwen Windsor, Occupational Therapist
7. Family Issues after an ABI - Tyla Young, Registered Psychiatric Nurse
8. Mental Health and ABI - Tyla Young, Registered Psychiatric Nurse
9. Physical Challenges Following ABI - Carol Farmer, Physical Therapist
10. Recreation and Leisure Following Brain Injury - Nicole Storoschuk, Recreation Therapist
11. Returning to School after ABI - Jolyn Brin, BEd BSW, Educator
12. Returning to Work After ABI - Gwen Windsor, Occupational Therapist
13. Seizure Education - Betty Anne Sinclair, RN CRN (C), ABI Rehabilitation Nurse
14. Substance Abuse and Brain Injury - Jolene McLeod, B.A,BSW,RSW, Registered Social Worker

Each of the Introduction to ABI presentations were viewed from 17 to 107 times, for an average of 41 views each. "Brain and Brain Injury – Part 1" was the most frequently viewed, followed by "Recreation and Leisure Following Brain Injury", "Brain and Brain Injury – Part 2", and "Family Issues after an ABI".

A web survey of our new Intro to ABI was posted in the spring of 2015. Preliminary results (eight respondents) suggest the list of topics is relevant – 50% of respondents indicated ALL topics would be useful to them, and every topic received 1-5 endorsements. The results also suggest the information posted is interesting and of good quality (average of 4.3 on a 5 point Likert scale). All raters indicated they would recommend the presentation(s) to a friend/colleague.

Brain Trust – Annual Provincial Conference

2013 CONFERENCE – BRAIN INJURY AND THE FAMILY

*Bouncing Back after Brain Injury: A Family Guide -
Presented by Jeffrey S. Kreutzer, Ph.D.*

This learning opportunity was a pre-conference workshop offered in conjunction with Brain Trust 2013 – Brain Injury and the Family (a clinical conference). The intended audience was adult family members, spouses, caregivers, and friends of brain injury survivors. This session was hosted in partnership with the Saskatchewan Brain Injury Association.

*Practical Approaches to Working with Families after
Brain Injury and Other Neurological Disorders -
Presented by Jeffrey S. Kreutzer, Ph.D.*

This day-long seminar outlined the "*The Brain Injury Family Intervention*" – A manualized intervention founded on cognitive behavioral and family systems counseling theories designed by Dr. Jeffrey Kreutzer to promote

Evaluation results for Brain Trust 2013 and 2014 were very positive. Conference attendees gave the question "Overall, the conference met my expectations" an average rating of 4.0 in 2013 and 4.2 in 2014 on a 5 point Likert scale. These are the highest Brain Trust ratings since 2007.

effective coping strategies for families experiencing significant emotional and behavioral changes post-injury. This seminar was intended to help clinicians more effectively evaluate and address the post injury needs of family members.

The Savvy Professional: Bringing Your Life to Work and Your Work to Life – presented by Crystal Willms

Crystal Willms shared her experience and insights as a former brain injury caregiver and experienced Brain Injury Management Expert.

Brain Injury Family Intervention - Presented by Jeffrey S. Kreutzer, Ph.D.

This half-day post-conference workshop featured the Brain Injury Family Intervention (BIFI), a whole family, structured, empirically-based treatment developed at Virginia Commonwealth University over the last decade.

2014 CONFERENCE - ADDICTIONS, MENTAL HEALTH AND BRAIN INJURY

Brain injury is often a catastrophic, life altering event for individuals and their families. Survivors of brain injury can experience significant and permanent changes in relationships, employment, income, their support network and overall quality of life. Many individuals with brain injury struggle with mental health issues such as depression and/or substance abuse. The onset of these issues may occur post injury but may also have existed before the injury happened. This conference was meant to help improve the level of knowledge in mental health and addictions as well to work to improve overall coordination of services. The following were the sessions offered at Brain Trust 2014:

- ***Meeting the challenge of substance misuse after brain injury - presented by Carolyn Lemsky, Ph.D., C.Psych ABPP-Cn.***
- ***Practical Applications from the Positive Psychology Research in an ABI population - presented by Laurie Denton, R.N.***
- ***Mental Health First Aid: an overview and discussion - presented by John Mitchell, R.N., R.P.N.***
- ***Our Journey and the Importance of Hope, Empathy, and Compassion - presented by Fred Sarkari***

Traffic Safety and Injury Prevention Community Grants

HISTORICAL OVERVIEW

Since 1997, the ABI Partnership Project and SGI have been involved in a joint program to provide community grants for traffic safety and ABI prevention programs. The goal of the Community Grants program is to enable community groups to establish, enhance and deliver programs that address safety issues in their communities.

SGI and the Ministry of Health (through the ABI Partnership Project) jointly fund this community grant program. In recent grant cycles, SGI has provided additional funding specifically aimed toward road safety issues. Since the Community Grant Program started in the fall of 1997:

- Over \$1.9 million has been awarded to Saskatchewan organizations through community grants,
- Over two thousand projects have been funded (2,102), and
- 15 urban and 264 rural communities have received grants.

On average, every grant deadline (semi-annual cycle, either February or October):

- 58 community grants are awarded
- \$55 thousand in funding is awarded

Overall, 68% of the grant applications received since 1997 have been approved. To date, more grants have been awarded to rural communities, although, more funding has gone to urban communities (see Table 23: Community Grants Awarded from October 1997 to February 2015).

Table 23: Community Grants Awarded from October 1997 to February 2015

Rural or Urban	Number of Grants Awarded	Funding Awarded
Rural	1,398	\$898,685
Urban	704	\$1,078,460
Grand Total	2,102	\$1,977,145

OVERVIEW OF 2013-14 AND 2014-15 FISCAL YEARS

The data for 2013-14 and 2014-15 is consistent with this overall trend whereby the majority of grants went to rural locations (59%); however, the majority of funding went to urban locations (58%).

**Table 24: Community Grants Awarded by Urban or Rural Location,
2013-14 and 2014-15**

Rural or Urban	Number of Grants Awarded	Funding Awarded
Rural	109	\$71,335
Urban	71	\$94,637
Grand Total	180	\$165,973

The grants for 2013-14 and 2014-15 were spread across Saskatchewan, awarded to southern communities such as Gravelbourg and Swift Current, eastern communities such as Yorkton, western communities such as Lloydminster, and northern communities such as La Ronge and Montreal Lake.

Table 25 shows the funding breakdown across the three service areas recognized by the ABI Partnership Project: North, South and Central.

**Table 25: Community Grants Awarded by Location (North, South, Central),
2013-14 and 2014-15**

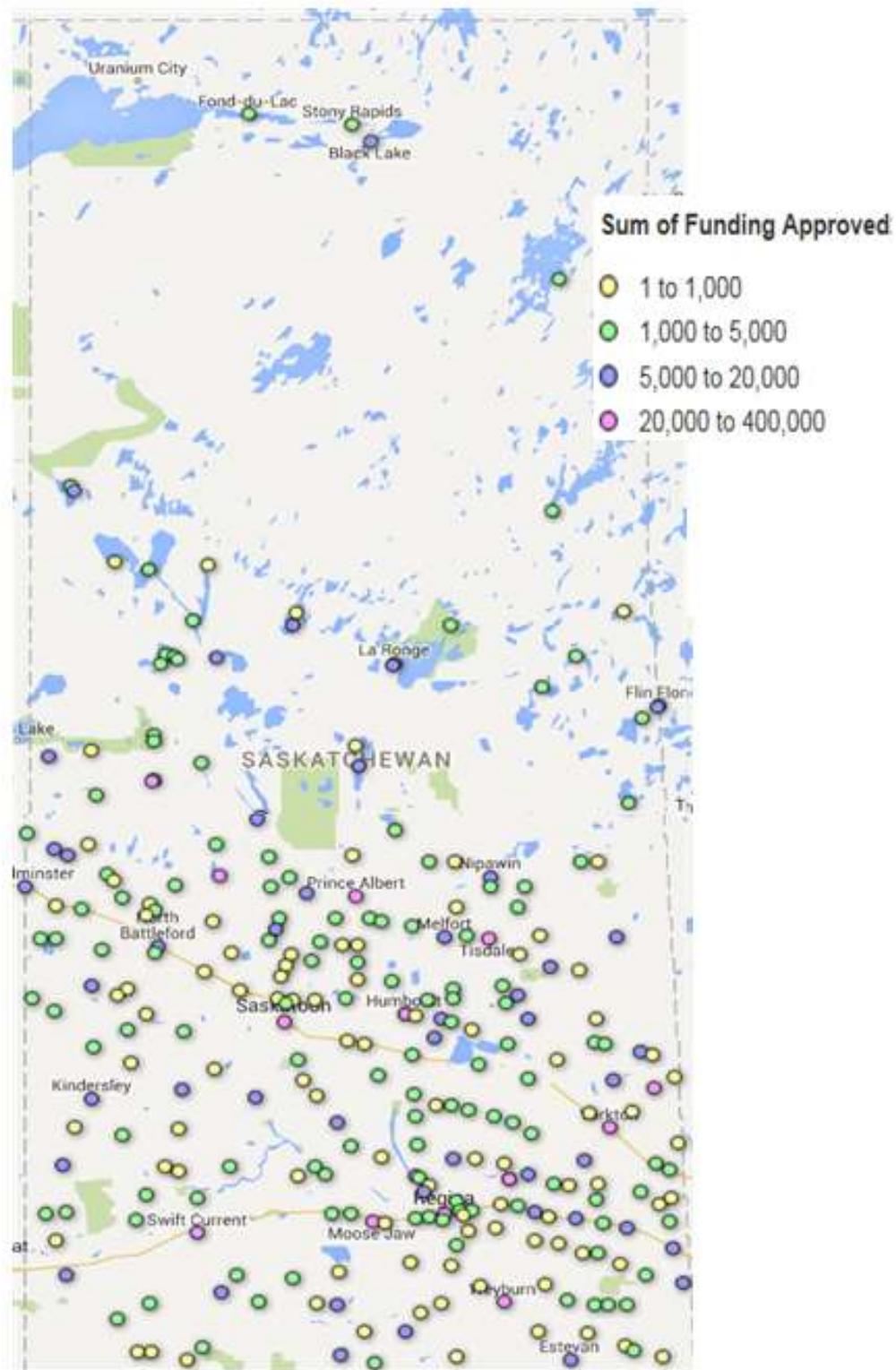
Region	Number of Grants Awarded	Funding Awarded
North	36	\$20,707
South	91	\$87,525
Central	53	\$57,741
Grand Total	180	\$165,973

In 2013-14 and 2014-15, examples of community grants awarded include:

- helmets for injury prevention events,
- car seats for programs and prenatal classes,
- various programming costs (speakers, prizes, helmets) for a wide variety of injury prevention programs (e.g., bicycle safety rodeos, PARTY, Drivers safety, SADD presentations), and
- a school pedestrian safety improvement program.

Figure 13 on the next page illustrates the historical geographic distribution of community grants, broken down by the funding levels awarded to communities. This map provides a good depiction of the provincial reach and benefit of this grant program.

Figure 13: Community Grants funded since 1997, by funding amount



Education Event Sponsorship

Throughout this contract period, the ABI Partnership Project partnered with several organizations, and assisted with funding several educational events relevant to the treatment, management and prevention of brain injury.

2013

- *Introductory Course in the Treatment of Adult Hemiplegia*, RQHR - April 17-21, 2013
- *Concussion Management Symposium*, University of Saskatchewan - April 26-27, 2015
- *Promoting Independence through Skills-Teaching (Telehealth)*, Sunrise Health Region - May 31, 2013

2014

- *Adult Aphasia Course*, RQHR - September 12-13, 2014

2015

- *Plain Language Workshop*, PAPHR - January 28, 2015
- *Revised Guidelines for the Management of Mild Traumatic Brain Injury and Persistent Post Concussive Symptoms*, Dr. Shawn Marshall, SHR Lecture/Telehealth - May 12, 2015
- *Brain Bee Competition*, Saskatchewan Neuroscience Network, University of Saskatchewan - May 2015
- *Where It's AT: Assistive Technology for Children & Youth Conference*, Saskatoon, SK - Sept 24-25, 2015

Newsletter

In January 2015 the ABI Provincial Office reintroduced the program's newsletter at the request of the funded programs. The newsletter was previously produced quarterly but had not been produced since the introduction of the website as it was thought that the website would take its place. The newsletter contains staffing updates, upcoming events, educational information and more. Programs are encouraged to contribute stories and content. The contract position created in PA Parkland Health Region referenced in the "Intro to ABI Section" has been assisting the ABI Provincial Office with

a number of provincial educational projects this contract period and has taken on the role of newsletter Editor.

Regional Initiatives – Injury Prevention

Education and Prevention Coordinator Programs

Education and Prevention Coordinators serving the central, north and south service regions, and located in Saskatoon, Prince Albert, and Regina respectively

Many of the education and prevention initiatives funded by the ABI Partnership are conducted by the three Regional Education and Prevention Coordinators who are responsible for working with communities in their respective service regions (South, Central, and North).

The Regional ABI Education and Prevention Coordinators support community-based injury prevention and brain injury education initiatives. The goals of the coordinators include:

- To promote the need for injury prevention and ABI education initiatives in communities
- To engage communities to become involved in injury prevention
- To assist communities to plan, implement, and evaluate injury prevention initiatives

In general, the ABI Education and Prevention Coordinators provide research, education, promotion, community development, and resources to communities on a wide variety of topics. The primary activities of the ABI Education & Prevention Coordinators are to:

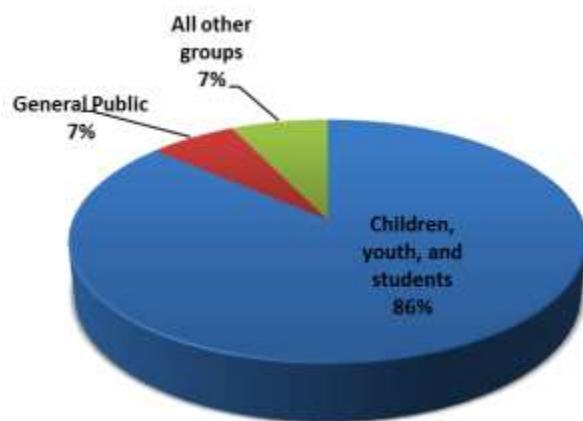
- Facilitate the introduction of Brain Walk and PARTY programs to communities,
- Recognize and build capacity within communities to identify and address injury issues using available resources and data,
- Initiate and maintain partnerships with other agencies, community members, other health professionals, and other ABI funded projects, and
- Research, develop, and distribute information and resources about the brain, brain injury, and injury prevention.

PROGRAM ACTIVITIES

Almost one-quarter of Education and Prevention Coordinator time is spent on *community development*, accounting for 24% of time and 17% of contacts/attendees in 2013-14 and 2014-15. This is in line with these programs' priority of "working with communities to promote the need for injury prevention and ABI education initiatives" and "engaging communities to become involved in injury prevention" – see above.

- Nineteen percent of all service time in 2013-14 and 2014-15 was coded as *administration and evaluation*, which is in line with the third priority for these programs: "To assist communities to plan, implement, and evaluate injury prevention initiatives."
- Another 19% of service time was coded as *program preparation and follow-up*, and *event delivery* made up an additional 18% of service time.
- *Event delivery: there were 319 events that were delivered by, or with assistance from, Education and Prevention Coordinators in 2013-14 and 2014-15 to over 21,000 event attendees¹³. The vast majority of event attendees (18,455 attendees) were children, youth and students (see Figure 14) who attended Brain Walk and PARTY events (see Table 26).*

Figure 14: Types of attendees at 2013-14 and 2014-15 events delivered or facilitated by Education and Prevention Coordinators



¹³ These numbers only account for Event Delivery, and exclude program preparation and follow up, resource development, providing resources, etc.

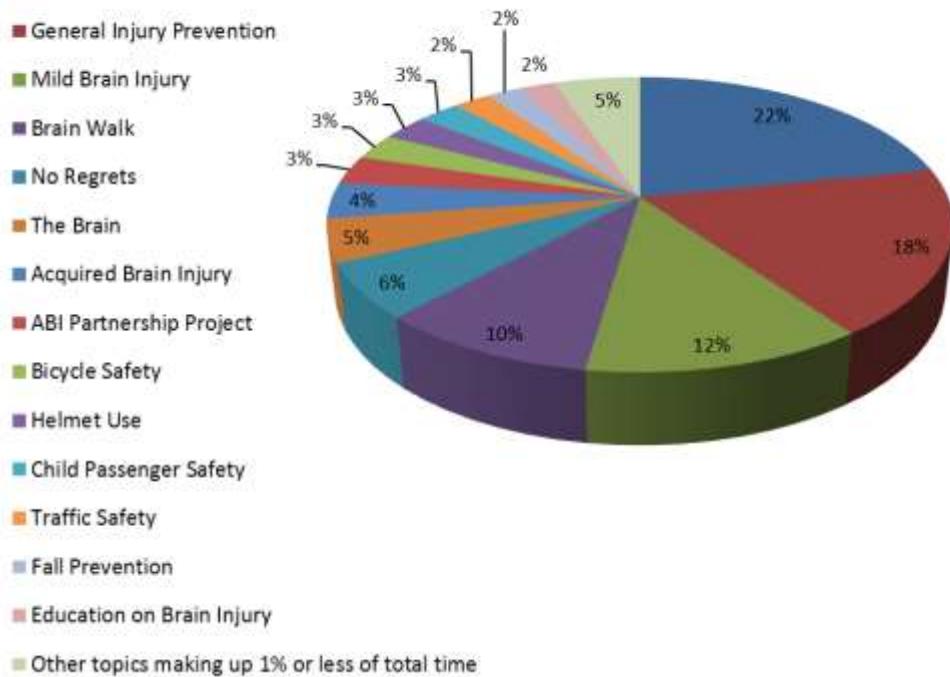
Table 26: Breakdown of Events Delivered by Education and Prevention Coordinators, 2013-14 and 2014-15

Topic of Event	Total # of Attendees	Number of Events
Brain Walk	8,443	66
PARTY	4,093	75
The Brain	1,702	34
Helmet Use	1,424	8
Child Passenger Safety	1,044	37
Mild Brain Injury	975	33
Snowmobile Safety	615	4
Bicycle Safety	605	14
Pedestrian Safety	598	5
School Bus Safety	520	1
General Injury Prevention	508	9
Acquired Brain Injury	237	10
Fall Prevention	142	6
Farm Safety	135	3
No Regrets	126	4
ABI Partnership Project	115	4
Education on Brain Injury	93	6
Grand Total	21,375	319

EDUCATION AND PREVENTION COORDINATOR – RESOURCE DEVELOPMENT

Education and Prevention coordinators also spend time on resource development (22% of total service hours) on a wide variety of topics.

Figure 15: Education and Prevention Coordinators' Resource Development Time by Topic Area, 2013-14 and 2014-15



PRIORITY TOPIC AREAS

There are a few standard programs that Education and Prevention coordinators work with communities to develop and sustain. These programs are: PARTY, Brain Walk, and No Regrets are described below.

Prevent Alcohol and Risk Related Trauma in Youth (PARTY) Program

In response to a high annual rate of impaired driving-related crashes in young drivers as well as other high-risk behaviour, the Regional Education and Prevention Coordinators obtained and began implementing a new program in the province in 2004 to address alcohol and risk-related injuries in youth.

Students 14-19 years old experience a full-day session that involves following the path of an injury survivor and meeting the professionals that would care for them in a trauma situation. Paramedics, law enforcement, nurses, therapists, addiction workers and others describe the painful journey of a trauma patient. Facts are presented about head and spinal cord injury, and the students have hands-on experience with the equipment used in trauma care and rehabilitation. The most powerful part of the day is the injury

survivor presentation. A brain injury survivor talks frankly about their injury, the events that lead to the injury and what their lives are like now. Students have the opportunity to ask questions of these speakers and learn what life is like after an injury.

In the 2013-14 and 2014-15 fiscal years, there were over 2,000 service hours dedicated to the PARTY program recorded in ABIIS by Education and Prevention coordinators, making up 28% of their total service time. The majority of this time was spent on program preparation and follow-up (27%), community development (23%), and event delivery (21% of total PARTY time).

There were over 4,000 children and youth who attended the 75 PARTY events facilitated by Education and Prevention Coordinators in the 2013-14 and 2014-15 fiscal years.

Brain Walk

Brain Walk is an interactive walk through of the brain, which helps students learn about the brain's functions and about keeping the brain safe. It is targeted toward Kindergarten to grade 6 students, but is easily adapted for audiences of all ages. It was created by the ABI Partnership and based on the "Body Walk" model that was developed by the former Saskatchewan Northern Health Services Branch (now Mamawetan Churchill River and Keewatin Yatthé Health Regions).

Brain Walk sends students through 10 different stations highlighting the different areas of the brain and its functions. It also includes stations that demonstrate how to protect the brain, how alcohol and drugs affect the brain, and what it would be like if you hurt your brain. Each station involves demonstrations, activities, displays, and questions.

Effectiveness of the PARTY program...

The Central Education and Prevention Coordinator examined the effectiveness of PARTY in her site level evaluation. The percent of ideal answers to questions about risk-taking was calculated by taking the ideal, or non-risk taking answer to each question (yes/no answers) in a pre-program questionnaire, one week post-program questionnaire, and finally a six month post-program questionnaire. Knowledge was also assessed.

When comparing the six month questionnaire results to the pre-program questionnaire results, there was: 1) A **positive change in attitude** in all attitudinal questions (except regarding reckless skiing and snowboarding); and 2) An **increase in knowledge regarding how to avoid risk**.

These results support the effectiveness of PARTY programs for teaching youth about risk taking behaviours and their consequences.

The students travel around the stations in groups of five or six, and have five to six minutes at each station. Each station is managed by a volunteer facilitator.

The students, teachers, and volunteers evaluate each session. In addition, a questionnaire is administered to the students, pre- and post-presentation, that measures change in knowledge. Brain Walk has become a core educational activity of the Partnership targeting elementary-school aged children. Based on past feedback, it is expected it will continue to be frequently delivered and positively received for many years to come. School (teachers and volunteers) and student feedback continues to be very positive.

In the 2013-14 and 2014-15 fiscal years, there were 819 service hours dedicated to this program with over 8,800 attendees recorded by Education and Prevention coordinators. The majority of this time was spent on event delivery (45%) for 368 hours to over 8,400 attendees, program preparation and follow-up (34%), and resource development (11%).

There were 8,338 children and youth and 102 members of the general public that attended the 66 Brain Walk events facilitated by Education and Prevention Coordinators in the 2013-14 and 2014-15 fiscal years.

No Regrets

Piloted nationally in 2003, SMARTRISK *No Regrets* is a high school-based peer leadership program that trains staff advisers and student leaders to raise awareness and implement injury prevention activities and events in their schools. These activities and events are designed to promote at least one of the SMARTRISK five key messages (Buckle Up, Look First, Wear the Gear, Get Trained, and Drive Sober) and influence the

Effectiveness of Brain Walk...

The North Education and Prevention Coordinators chose to evaluate Brain Walk, as it is one of the largest programs they deliver. Evaluation results for Brain Walk were very positive, with 87% of students grades 1-7 choosing a “happy face” when asked what they thought about the Brain Walk program, and 100% of teacher and staff indicating that they were happy with the program.

The evaluation also demonstrated learning with respect to functions of the brain, ways to protect their brain (97% responded to wear a helmet), and the long term effects of brain injury.

risk-taking behaviour of students related to activities such as: driving, biking, skateboarding, skiing, snowboarding, snowmobiling, and partying.

In 2011, SGI and the ABI Prevention and Education Coordinators partnered to bring the program to several high schools in Saskatchewan. Training was offered to the students and teachers, and the Coordinators continue to act as a support and resource to the schools as they roll out their programs.

In the 2013-14 and 2014-15 fiscal years, there were 280 service hours dedicated to this program with 440 attendees recorded by Education and Prevention coordinators.

The majority of time was on community development of the program (56%), development of resources (20%), and promotion (10%). Event delivery made up 4% of total time in this area, for 12 hours to 126 attendees.

Mild Brain Injury

In the 2013-14 and 2014-15 fiscal years, there were 545 service hours dedicated to concussion or mild brain injury education, with 2,513 attendees recorded by Education and Prevention coordinators. The majority of time in this topic area was spent on research and professional development (26%), development of resources (21%), and community development (16%). Event delivery made up 13% of total time in this area, with 70 attendees recorded.

Needs Assessment for Mild Brain Injury Education

The South Education and Prevention Coordinator chose to do a survey of currently used concussion resources and concussion management policies and procedures within schools. The general trend of the results indicates that there is a universal need for concussion management resources and accompanying policy and procedure for the management of concussions.

While mild brain injury is not a top activity of the Education and Prevention Coordinators, there appears to be an ever increasing awareness within the general public. As such, the Coordinators are exploring ways to better serve the needs of teachers, staff, coaches, administrators, parents and students in this area.

SITE LEVEL EVALUATION INFORMATION

The three Education and Prevention Coordinator programs did a survey of community partners in 2014. Respondent ratings were very positive with an average satisfaction score of 92% (or 4.2 on a 5 point Likert Scale).

Table 27: Education and Prevention Coordinators Community Partner's Survey, 2014

Questions	South n=13	Central n=42	North n=24	Average over 3 Service Areas	2006 Results* n=28
Q3: Did our services meet your expectations?	4.7	4.8	4.8	4.8	4.7
Q4: Were we able to assist you in your overall goal?	4.6	4.8	4.6	4.7	X
Q5: To what degree do you think your community benefited from participating with ABI Education and Prevention Services?	4.2	4.3	4.3	4.3	4.9
Q6: Do you feel that the ABI Education and Prevention Coordinator collaborated well with you or members of your organization/community?	4.6	4.7	4.8	4.7	4.9
Q7: Given your overall satisfaction, would you collaborate again on future activities?	4.7	4.9	4.8	4.8	4.9
Average Satisfaction Score	4.6	4.7	4.7	4.6	X

* The 2006 survey used a different Likert scale where averages fell between "Mostly" (4) and "Very Much" (5). The current Survey's averages fall between (4) and (5). Questions 3, 4, and 6 used: Not at all (1), Slightly (2), Somewhat (3), Mostly (4), and Very Much (5); Question 5 used: Not at all (1), Slightly (2), Somewhat (3), Quite a bit (4), and An extreme amount (5); Question 7 used: No chance (1), Very little chance (2), Some chance (3), Good chance (4), and Very good chance (5).

Child Injury Prevention Program Activities

The Saskatchewan Prevention Institute (SPI) is a provincial non-profit organization located in Saskatoon that is funded to raise awareness and deliver education about the prevention of acquired brain injury in children.

The focus areas of the child injury prevention program were determined based on the evidence and supporting research on the main causes of acquired brain injury among children as well as what interventions are most effective in reducing these types of injuries. Injury prevention interventions include education, legislation, and engineering approaches. The SPI strives to implement multifaceted strategies combining these three methods whenever possible in order to successfully reduce acquired brain injuries among children in Saskatchewan.

MAJOR PROGRAM AREAS OF SPI - CHILD INJURY PROGRAM

1. Child Injury Prevention Program

The Child Injury Prevention Program covers a wide range of topics and information regarding injury prevention. The program relies on partnerships, funding and staff input to achieve its goals. Resources and activities developed within the program are intended for health care professionals, community groups, child and family workers, communities, schools and school groups, and parents and caregivers.

2. Bicycle Safety

The goal of SPI in this area is to decrease the occurrence of child injury resulting in disability or death due to bicycle-related incidents in Saskatchewan. In their efforts to achieve this SPI organizes Bicycle Safety Week annually, develops resources, provides on line information, and participates in general community education around bicycle safety.

3. Child Passenger Safety

Every year the Child Injury Prevention Program supports the Child Traffic Safety Program at SPI to address child passenger safety. Support includes participating in car seat clinics, educating professionals and caregivers, and assisting at updates and new trainer sessions. In Saskatchewan, it is the law for children to be in child restraints until they are a minimum of 40lbs (18kg). Unfortunately, a number of factors result in child restraints being installed incorrectly or not being used at all. The best thing that can be done to prevent child deaths in motor vehicle crashes is to make sure children are always buckled up properly in an appropriate child restraint that is installed correctly.

4. Farm Safety

Children on farms live in a unique environment as their home is combined with a work environment that may include heavy machinery, livestock and large bodies of water. Special attention has to be made to ensure that children are protected from these potential risks. Children who may visit a farm also need special attention, including adult supervision, to ensure they have a positive experience with a reduced risk of injury. SPI develops resources on the farm safety, provides on line information for children and parents, and partners with other agencies in the general promotion of safety on farms.

5. Helmet Safety

In 2012, a study on rural helmet use was completed by the Child Injury Prevention Program. The study, 'Parental attitudes and behaviours concerning helmet use in childhood activities: Focus group interviews in rural Saskatchewan'¹⁴, examined rural parents' attitudes regarding helmet use and investigated when, and for what activities, they require their children to wear helmets. To increase child helmet use in rural Saskatchewan, the conclusions of the study suggest that an improved effort needs to be made to reach rural populations with helmet use information; opportunities to purchase affordable helmets need to be provided for rural families; and legislating mandatory helmet use for specific activities should be pursued. This information will be used in developing resources, interventions and programs on helmet use.

6. Home Safety

Before children are old enough to go to school, they spend the majority of their time in and around their homes or at the homes of their care providers. Homes are the place in which young children most often suffer an injury. Injuries may occur due to structures in the home, such as stairs; products found in the home, such as toys with small parts or chemicals; and situations in the home, such as access to boiling water or unsafe sleeping environments. The Child Injury Prevention Program focuses on a number of topics within home safety, including: falls, threatened breathing (drowning, choking, suffocation, strangulation), poisoning, and fire and flame. There is an emphasis on safety for children under the age of five in the home.

¹⁴ The Parental Attitudes study was recently published in: *Accident Analysis & Prevention*, Volume 70, September 2014, Pages 314–319.

7. Pedestrian Safety

Children's primary mode of independent transportation is walking. Children may walk to school, the park, or a friend's house. Ensuring children are safe as pedestrians, requires special attention due to their physical size and cognitive development. The Child Injury Prevention Program works to raise awareness of the many dangers that are present for child pedestrians, with a focus on child development, as well as promoting the importance of parents and caregivers in teaching children how to cross the street safely.

8. Playground Safety

Children use play as a way of discovering the world around them as well as a way to develop physical skills such as balance and eye-hand coordination, and psychological skills such as problem solving. A playground offers a prime location for children to explore, however they must be able to explore in a safe environment that does not pose any hazards to their health and safety. Life threatening playground injuries include head and brain injuries from falls and strangulation or choking from ropes, small spaces, or having strings and straps from clothing or helmets get caught in equipment. Other common injuries include fractures, cuts, scrapes, and burns from slides. The Child Injury Prevention Program works in playground safety to decrease the incidence of child injury due to playground incidents and increase the positive play experiences for children.

9. Shaken Baby Syndrome/Abusive Head Trauma

Shaken baby syndrome (SBS) is a form of abusive head trauma and child abuse. SBS can result in devastating and permanent injuries to the affected infant. The injuries of SBS often result in a lifetime of special services and health care requirements, resulting in a corresponding increase in health care costs and education costs in the province.

Caregivers may shake a baby due to uncontrolled emotions and frustration when caring for a child that is crying or 'misbehaving'. Shaking may also be acted out in combination with other forms of child abuse. The injuries seen in SBS cannot be attributed to any other day to day activity such as a baby falling from a height or during play. SPI works with other health care professionals and agencies to provide resources and on line information to caregivers about these risks.

SERVICE STATISTICS FOR SPI

For the 2013-14 and 2014-15 fiscal years, the Saskatchewan Prevention Institute recorded 2,387 hours of service time. Eighty percent of this time was on Bicycle Safety (44% of service time), General Injury Prevention (28% of service time), and Playground

Safety (7% of service time). The other 20% was spent on a wide variety of topics. Ninety percent of attendees were recorded in the areas of Bicycle Safety (60%) and General Injury Prevention (30%).

The largest proportion of the Saskatchewan Prevention Institute's time was spent on program preparation and follow-up (25%), resource development (22%), and community development (17%).

EFFECTIVENESS OF SASKATCHEWAN PREVENTION INSTITUTE (SPI) – HIGHLIGHTS FROM THEIR SITE LEVEL EVALUATION

The SPI routinely evaluates their program areas. The ABI Partnership regularly receives these evaluations and they have historically been very positive. The following are some highlights from their site level evaluation.

SPI organized **Bicycle Safety Week 2014** for May 12-18th. SPI supported 55 communities throughout Saskatchewan (8 visited by the Child Injury Prevention Program). These participants and their community partners reached over 6,000 children in Saskatchewan. During Bicycle Safety Week 2014, SPI distributed 4,706 paper resources, 9,000 promotional wristbands, 550 bells, and 50 bike rodeo toolkits to registered participants for their communities and child participants during Bicycle Safety Week. An evaluation completed by participants of Bicycle Safety Week showed that 100% of registered participants found the resources on the website easy to access, and felt they received their requested resources in a timely manner.

The **Raising Saskatchewan video campaign** ran from September 2013 to July 2014, and was designed to create conversations and raise awareness about child injury prevention in Saskatchewan. The Child Injury Prevention Program Coordinators travelled throughout Saskatchewan to conduct interviews with parents, caregivers, organizations, and communities about the work they do to keep children safe. The resulting videos were shared on YouTube via SPI's website, Facebook, and Twitter. By the end of the campaign, 17 videos were created and disseminated. Each of the videos can be viewed on SPI's website at <http://www.skprevention.ca/raising-saskatchewan-video-campaign/>.

Highlights from the survey of viewers (36 respondents) include:

- All but one of the respondents indicated that the video they watched made them think of ways a child could be injured (n = 35, 97.2%).
- The majority of respondents felt that the videos made them think of ways to prevent injuries in children (n = 30, 90.9%), particularly in terms of supervision and actively teaching children to be safe.

- The total number of views for the Raising Saskatchewan campaign was 3,755, with the average number of views per video being 221.

SPI's **resources** are updated each year to ensure they have current information and reflect the needs of communities, organizations, professionals, parents and caregivers, and children in Saskatchewan. Print resources are distributed at safety days, fairs, and other events where the Child Injury Prevention Program has a table or booth. In the 2014-15 fiscal year, SPI distributed a total of 11,966 resources. The five top resources were (from most to least distributed):

- *Safe Cycling With Sam* brochure
- *Gotta Brain Getta Helmet* information card
- *When Your Baby Can't Stop Crying* brochure
- *Protect Your Baby's Head Shape* brochure
- *Home Safety: Birth to 1 Year* brochure

Regional Initiatives – Other Funded Programs

Aside from the five programs grouped as *Education and Prevention programs*, many programs that primarily provide direct client service also deliver or facilitate injury prevention events, support groups, and other community groups for a variety of audiences.

In 2013-14 and 2014-15, agencies funded primarily to provide direct client support recorded a total of 2,699 hours of service with 15,977 attendees – over 7,600 attendees at 338 delivered events, and 239 support groups.

- Funded agencies also provide education to a variety of audiences on ABI. In the 2013-14 and 2014-15 fiscal years, there were 58 education sessions delivered to over 2,000 attendees. Over half of the attendees were children, youth and students, but the general public and health care professionals were also well represented.
- Some of the other funded programs also engage in P.A.R.T.Y. activities. In 2013-14 and 2014-15, there were over 329 service hours dedicated to the PARTY program recorded in ABIIS by other funded programs. *There were over 1,200 children and youth who attended the 24 PARTY events facilitated by other funded programs in the 2013-14 and 2014-15 fiscal years (includes Sunrise and Cypress ABI Regional Coordinators, Central ABI Outreach Team, and East Central SARBI).*
- The Sun Country ABI Regional Coordinator also engaged in Brain Walk activities in 2013-14 and 2014-15. There were 470 children and youth who attended the three (3) Brain Walk events facilitated.

Education and Prevention Activities by Community

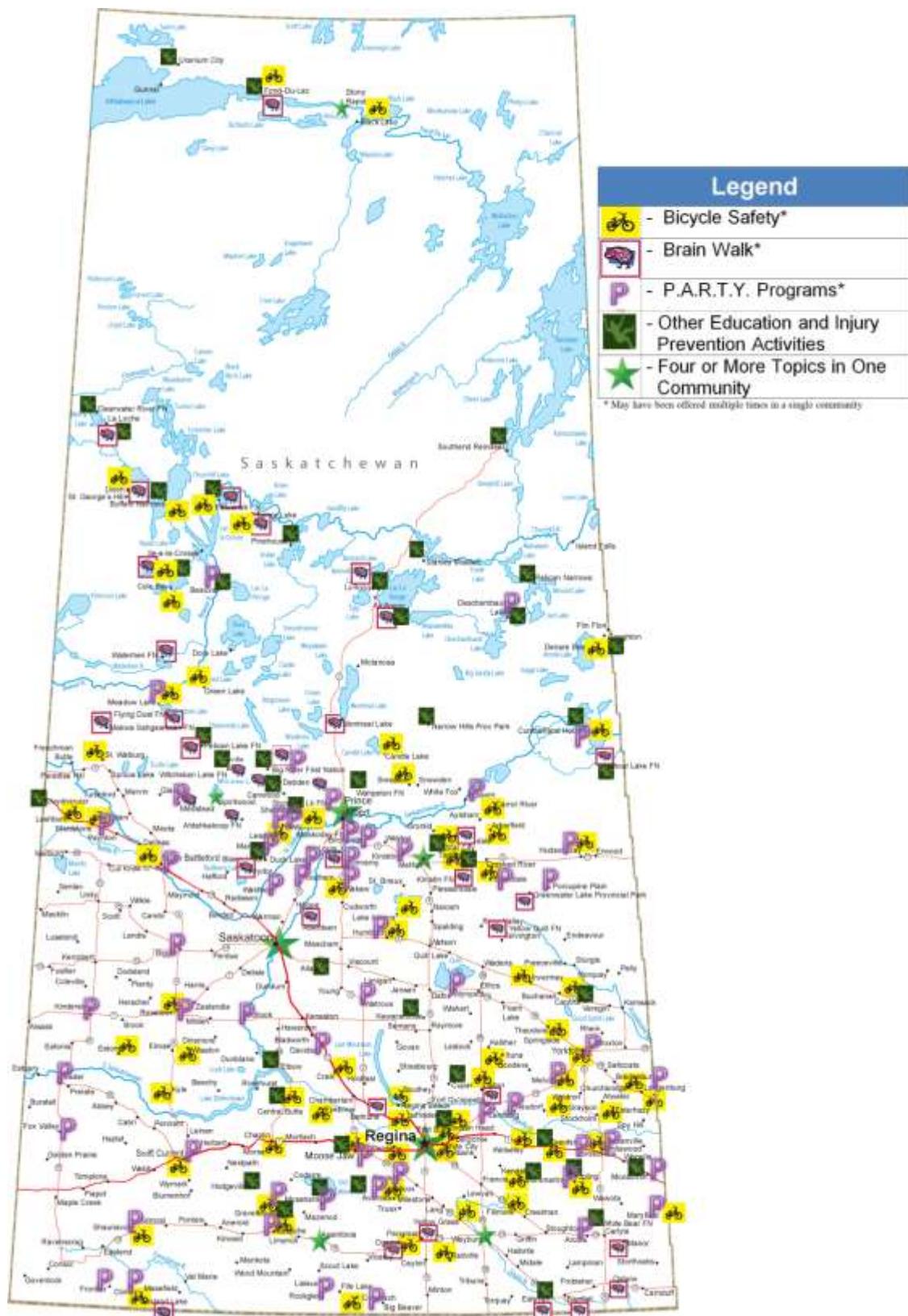
Sixty-one communities delivered the PARTY program during this contract period, with some communities hosting annual events and other larger centres like Saskatoon, Prince Albert and Yorkton having multiple events in multiple schools each year.

In addition to PARTY activity, programs listed a variety of Education and Prevention Activities happening in 138 separate communities throughout the province.

Education and Prevention activities are being delivered as ‘events’ in-person through in-services, meetings or presentations, as well as through ‘community development activities’ in-person, electronically or by phone and through ‘resource distribution’ sent by email or letter mail. A variety of activities have occurred across the province. The most common activity related to Bike Safety with the Saskatchewan Prevention Institute (SPI) listing 75 communities alone that participated in some fashion in Bike Safety Week (an event that SPI organizes annually). Other common Education activities include: Brain Walk which was delivered in 31 communities (including 7 schools in Prince Albert), General ABI education – in 19 communities (including multiple presentations referenced in Saskatoon, Regina, Prince Albert, and Moose Jaw), Child Passenger Safety, Snowmobile Safety, Traffic Safety, Falls Prevention, Farm Safety, Child Injury Prevention, etc. The Prince Albert Education and Prevention Coordinator focused efforts on education around the Effects of Trauma, Alcohol and Drugs on the Brain and delivered this presentation to 13 separate communities, including multiple presentations to service providers in Prince Albert.

Figure 16 on the next page maps these activities by theme and community.

Figure 16: Education and Prevention Activities by Location and Topic



Regional Initiatives – Survivor and Family Support

Survivor and family support is provided by a number of programs including the Saskatchewan Brain Injury Association (SBIA), Regional Coordinators through Support Groups, Outreach Teams through Family Panels and other events, the Parent Knowledge Exchange series delivered through Radius in Saskatoon, and many other agencies that facilitate support groups and other seasonal opportunities for family and survivor gatherings.

Services for Families of ABI Survivors

Brain injury impacts the family in substantial and significant ways, as the majority of caregiving responsibilities for persons with ABI fall predominantly to informal caregivers such as spouses and parents over the long-term [21]. Based on their unique needs and important role, families were included in the Partnership's original mandate: *"Saskatchewan will have a comprehensive, integrated system of supports, resources and services that will enhance the rehabilitation outcomes and improve the quality of life for individuals with acquired brain injury and their families"* [5, page 5].

ECONOMIC BENEFITS OF CAREGIVING ROLE

A literature review did not yield direct evidence of the economic benefit of ABI family caregivers. The main literature base was found with respect to unpaid, family caregiving of the elderly. However, within this literature the economic benefits of informal/unpaid caregiving are clear. We know that there is a great societal benefit accrued from informal caregiving – both in economic and social terms.

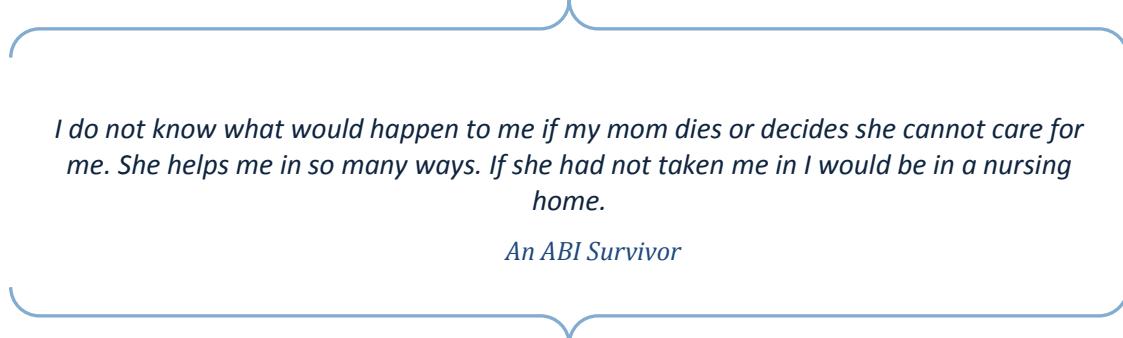
For example, a study looking at the imputed economic contribution¹⁵ of unpaid care for the elderly to the Canadian healthcare system, conservatively estimated it to be \$25-\$26 billion in 2009 [22].

It would be expected that calculating the economic contribution of ABI caregivers would be exponentially greater given that their caregiving role attends to a greater variety and

¹⁵ The imputed economic cost of informal caregiving would be defined as the cost incurred if the care provided by an unpaid caregiver was, instead, provided by a paid caregiver, on a direct hour-for-hour substitution basis.

often much more complex array of needs and is engaged in over a much longer timeframe.

The importance of family support is highlighted in the survivor comment below from one program's site-level evaluation.



I do not know what would happen to me if my mom dies or decides she cannot care for me. She helps me in so many ways. If she had not taken me in I would be in a nursing home.

An ABI Survivor

PREVIOUS EVALUATIONS

Family needs were formally evaluated in the 2004-2006 evaluation [8]. Findings from that evaluation confirmed what the medical and rehabilitation literature has long stated, that family members face one of their most difficult tasks in coping with the aftermath of brain injury [21]. The 2004-06 evaluation findings determined that addressing family needs should remain an important service activity of the Partnership. Since that time work has continued in recognizing and addressing the needs of family/caregivers. Service responses are tailored, where possible, keeping the impact to families in mind.

REPORTING ON FAMILY SUPPORT ACTIVITIES

Over the last three contract periods (including the current contract period) programs have been asked to continue to monitor and report back on their work with families. All ABI Partnership funded agencies were asked to submit information in the 2007-08 fiscal year to illustrate how they work with families. To update the picture of family work, in spring 2012, a subset of programs (Outreach Teams and Regional Coordinators) were polled to determine if the information that they had submitted in 2007-08 was still accurate. This polling exercise was done with this subset of program staff because, with their primary case management role, these are the programs that have traditionally worked most intensively with families. This group confirmed that they continue to work with families in the same general ways. This contract period, all funded agencies were asked, again, to provide both qualitative and quantitative information regarding their work with and for families as part of their year-end 2013-14 reporting.

The picture of family services that follows comes from information provided in the 2013-14 narrative reporting, a Family Service section in the site-level evaluation and our information system (ABIIS).

Family needs are addressed in a variety of ways by the ABI Partnership. In addition to the direct funding provided to the Saskatchewan Brain Injury Association to deliver three separate annual events to provide education and support to both families and survivors, our funded agencies also work with families in their day-to-day delivery of services by involving families in client (i.e., survivor) case conferencing and providing direct support and education to them as well as referrals for additional services based on individual family members' needs. As shown in Figure 4, 14% of Outreach Team Service Time in 2014-15 was communication with family or natural supports – half being with family alone, and half was communication with both the family and the client.

HOW PROGRAMS WORK WITH FAMILIES

When funded agencies were asked how their programs work with families they indicated that families are often their first point of contact and are involved with them in intake interviews and information-gathering. Depending on the severity of the survivor's injury, family may be the main point of contact for ABI program staff.

Family members are usually an integral part of the survivor's care team and are involved with the survivor (where requested/appropriate), in regular case conferences and goal-setting regarding the survivor's care plans.

ABI program staff informally assess the needs of family members and families are provided with ABI contact information for follow-up with ABI staff as needs arise.

Individualized services are provided to families, on a case-by-case basis, which can include in-person or phone consult and invitation/involvement in support group or other program activities such as seasonal celebrations. When survivors do not want/require service from ABI, but their family/caregivers do, the family (spouse, parent) is sometimes the primary client. Also, family may be seen independent of survivors to gain additional insight and information about family dynamics and needs.

FAMILY NEEDS ADDRESSED BY ABI PROGRAMS

After their loved one sustains a brain injury, a critical need for family and caregivers is to receive general information and education, along with psychosocial support [3, 23, 24]. As it is most often family members that take on caregiving roles to ABI survivors post-injury [24], it is both necessary and beneficial to equip them with information about what to expect and how to deal with the varied sequelae that manifests with brain

"I am believing we were acquainted with the ABI program when my wife was admitted in Regina, but at that time we were very confused we really didn't understand who they were. We received so much help from so many people... We are very grateful for all the assistance. Everything worked out exceptionally well and we couldn't have asked for anything more. People helped not only my wife but myself too. THANKS."

"We really can't pick one individual person, who helped the most—everyone did a terrific job and we would have been lost without their assistance. We are most grateful that this program is still in use. She is still included in activities. Thank you is never enough."

Independent Living Clients

injuries. As well, they often require information about what services and supports are available for their loved ones and then help in service navigation to access these services [25].

Targeted resources for family members have been developed by Partnership funded agencies. For example, the Saskatchewan Brain Injury Association (SBIA) *ABI Toolkit* is available in hardcopy upon request, as well as on the SBIA website. As well, the ABI Partnership regularly updates and reprints the *ABI Survival Guide*, an excellent resource originally produced by the Saskatoon Health Region. These resources help families to understand the changes that result from brain injury and to address issues in the course of ABI recovery. ABI staff also regularly research other resources and often direct families to many useful on-line materials.

ABI staff provide valuable information and support to families. Some important areas of work including helping families to understand and deal with survivors' changes in behaviour, navigating services (medical, financial, education, employment) to address their and their loved one's needs, coping with their own stress and depression, as well as adapting to role and relationship changes.

Families are sometimes referred for specialized services such as mental health counselling or addictions services. ABI staff also work with families and other service partners to ensure their safety when there are behaviour/aggression risks. Respite support is also arranged for families needing a break from their caregiving role.

ACTIVITIES THAT ABI PROGRAMS INVOLVE FAMILY MEMBERS IN

As support needs of family members often change over time [25], the provision of education and other support is ongoing. Educational resources are provided in formats such as newsletters and information tips to family members and survivors. For other support, staff are available for family consults and crisis management as needed.

Dependent on family needs at any given time, families are invited to be involved in the regular activities offered to survivors such as support groups and other social and recreational events such as information sessions, BBQs, seasonal dinners, coffee groups, and community outings.

While the majority of ABI Support Group meetings are open to family members to attend, family-specific support groups are sometimes also offered to address specific needs of a group of family members at certain points in time and are usually time-limited in fashion. Program feedback indicates this type of group offering would be revisited in the future, if assessed as necessary, when new family members with similar, unmet needs seek service.

In this contract period, family panels have been organized by all three (South, Central and North) Outreach Teams. These panel sessions provide the opportunity for family members throughout the teams' respective service areas to make new contacts, to share their stories with each other and to gain new information, connections and support.

SBIA EVENTS AND ACTIVITIES FOR FAMILY AND SURVIVORS

SBIA is a membership-based, provincial non-profit organization that works in partnership with other community organizations to create and enhance services and programs for people with ABI, their families and caregivers. Family members are often involved in volunteer activity through the agency's Board and other events and through these avenues they have input into the programming decisions of the organization that address family needs. As reported by SBIA in their 2014-15 annual report, SBIA offers a number of annual education and support services to ABI survivors and their families through numerous activities including:

- Support and Recreation events organized by SBIA "Chapters" include support groups, walking groups, and facilitated drumming sessions. These groups utilize the self-help/mutual aid model. SBIA Chapters offered:
 - Mixed survivor/caregiver support groups in Regina, Saskatoon, and Yorkton
 - Caregiver support groups in Regina and Saskatoon

- Walking groups in Kindersley and Moose Jaw
- Retreats held in Regina (Fall) and Saskatoon (Spring), and the Survivor and Family Camp at Arlington Beach in June. These events provide survivors and their families an opportunity to meet with other people who have shared a similar experience while learning from each other and guest presenters. Personal development content at each event covers a variety of topics to promote learning and self-care. Feedback regarding the events is obtained by questionnaire, and has been positive revealing that survivors and families feel the events have helped them deal with the challenges they experience and assist with stress reduction.
- A toll free telephone number is provided by SBIA for Saskatchewan residents to easily access support, information and referral services. Inquiries may require basic information on ABI or direction to the appropriate service(s).
- SBIA provides educational materials, displays and presentation in a variety of venues.
- SBIA has an introduction to head injury booklet and toolbox which are distributed through hospitals to families of brain injury survivors as a way to assist in their understanding of the new path a brain injury can lead them.
- SBIA maintains a resource library that is utilized by survivors, health care professionals and students.
- A quarterly SBIA newsletter is distributed to those who request it. The newsletter provides a general overview of past events that have occurred in support of ABI survivors, families and brain injury education.

Service Statistics for SBIA

For the 2013-14 and 2014-15 fiscal years, SBIA recorded 4,866 hours of service time related to funded programming, which includes program preparation and follow-up, delivery of events, promotion, resource development, etc. Much of this time was education on ABI (30%), Survivor and Family support events - Not support groups (26% of total time), and Camp and Retreat Events (23% of total time).

The largest proportion of the SBIA's time was spent on program preparation and follow-up (24%), survivor/family support (19%), and promotion (18%).

SBIA recorded the delivery (excludes program preparation, promotion, etc.) of 442 events, 168 of which were support groups accounting for 355 delivery hours (27% of total delivery hours), and an average of 9.6 attendees at each support group.

EDUCATION EVENTS TO SUPPORT FAMILIES

Two workshops – a pre-conference workshop for families and caregivers and a post-conference workshop for clinicians - were held in conjunction with the 2013 Brain Trust. The pre-conference workshop was offered in partnership with Saskatchewan Brain Injury Association. In addition, in order to provide more in-depth training on strategies for working with families, an intensive half-day post-conference workshop was delivered by Jeffrey Kreutzer based on his Brain Injury Family Intervention (BIFI) material after the Brain Trust 2013 conference (on October 6, 2013) to a small group of front-line service providers that work more frequently and directly with families.

FAMILY SERVICES AS RECORDED IN THE INFORMATION SYSTEM (ABIIS)

In an effort to gain a more accurate picture of the scope of services delivered to families/caregivers of survivors, changes to ABIIS coding were implemented at the beginning of the 2013-14 fiscal year. As discussed on page 25, funded agencies were told to code their service recipients differently just prior to the 2013-14 fiscal year. Not “who did the service benefit”, but rather “who did you communicate with”. This coding procedure has led to a better understanding of contact that funded agencies have with families and natural supports (see Figure 4: Service Recipients Recorded in the last four fiscal years, on page 26). The following are highlights from the 2013-14 and 2014-15 ABIIS data:

- Family/Natural Supports of registered survivors were the primary recipients of 4,800 events in 2013-14 and 2014-15, mostly as part of case management (41%), as receiving consultation, education or training (15%), or to address family members’ needs specifically (19%; includes referrals, case management, counseling, or psychosocial services for family). As shown in Figure 4 on page 26, *14% of all Outreach team events in 2014-15 were with family or natural supports, whether in combination or separate from their loved one with an ABI.*
- There were an additional 2,969 events delivered to BOTH family/natural supports and registered survivors. The largest proportion of these services was case management (46%) followed by Discipline-Specific Therapy at 11%; (9% of which was made up of speech language, occupational therapy, and physical therapy interventions).

- Family/Natural Supports of UNregistered survivors were the primary recipients of 217 service events, 96% of which were either family consultations or psycho-social services.
- Forty-one community group events for Family/Natural supports of ABI survivors were delivered to 538 attendees (average of 13 people at each event). The majority of these events were support groups (41%) or activities designed to give support but not support groups per se (23%).
- There were an additional 395 community group events designed for BOTH family/natural supports and survivors (average of 64 attendees per event). Similar to family-only events, the largest proportion of events designed for survivors and families were support groups (44% of total) or activities designed to give support but not support groups per se (20%), but also included a number of camp events (21%)¹⁶ and other Recreation and Leisure Groups (11%).

SUPPORT GROUPS

Group gathering and sharing provides a therapeutic benefit to both ABI survivors and their families/natural supporters. Through group involvement participants experience increased self-esteem, enhanced coping skills and stress reduction. The opportunity to socialize with their peers helps survivors to reduce their perception of stigma surrounding their disability [26-28]. Because of these benefits, the ABI Partnership currently delivers a variety of support groups throughout the province that benefit both survivors and their families/natural supporters. Support groups are offered in a variety of formats. Some are professionally-facilitated by front-line Partnership staff members (most often one of the Regional Coordinators or Outreach Team members), while others are peer-facilitated by survivors and/or family members. The content of these group sessions is also a combination of education/presentations and general socialization/peer support.

The majority of support groups offered have open membership to both survivors and their families. However, they are most regularly attended by survivors and often serve to provide a time of respite for families.

Family-only support groups tend to run on an ad hoc basis and have been previously offered in Saskatoon, Prince Albert and Lloydminster by ABI Partnership funded

¹⁶ Includes SBIA Camp and Spring and Fall Retreats

agencies. During this contract period SBIA has offered a Caregiver Support Group in Regina. This group originated as a partnership in August 2012 between the South Outreach Team, long-term care staff at Wascana Rehabilitation Centre and SBIA. After piloting the group with great success, SBIA went on to hire the facilitator and has continued to offer it monthly.

Support Groups serve to address a number of needs of their participants (both ABI survivors and their families). Often there is an educational component to the support groups that are professionally-facilitated, with an opportunity for Question and Answer, as well as general dialogue/roundtable discussion.

Examples of topics covered

include: general ABI education is often provided regarding fatigue, stress, financial planning, communication, relationships. Sometimes these groups provide the opportunity for more informal information-exchange. In addition to the important educational purpose that support groups fulfill, they provide the opportunity to lend support to and to be supported by one's peers. They offer their members a time of fellowship, shared understanding/compassion, as well as a safe place to learn and practice social skills [29]. Friendship networks are often established through group involvement and these friendships extend beyond the support group setting to impact the participating survivors in their everyday lives.

Feedback regarding support group content and format is regularly sought from their participants informally and via written questionnaires and this feedback often helps shape the topics covered in future sessions.

For example, starting in January 2014, Radius developed a support group, *The Parent Knowledge Exchange: Family Wellness Series* to address the educational needs of their participants' parents. Throughout this series, community partners have presented on a variety of topics such as: ABI education; goal-setting and transition planning; stress management and healthy lifestyles; Saskatoon Community Resources; and Wills, Powers of Attorney and Health Care Directives.



“[I] enjoy being with others and discussing all aspects of brain injury. I have enjoyed all the discussions, laughs and tears. Gets me out of the house...The staff I find are great and supportive. They help lead the group and offer lots of support.”

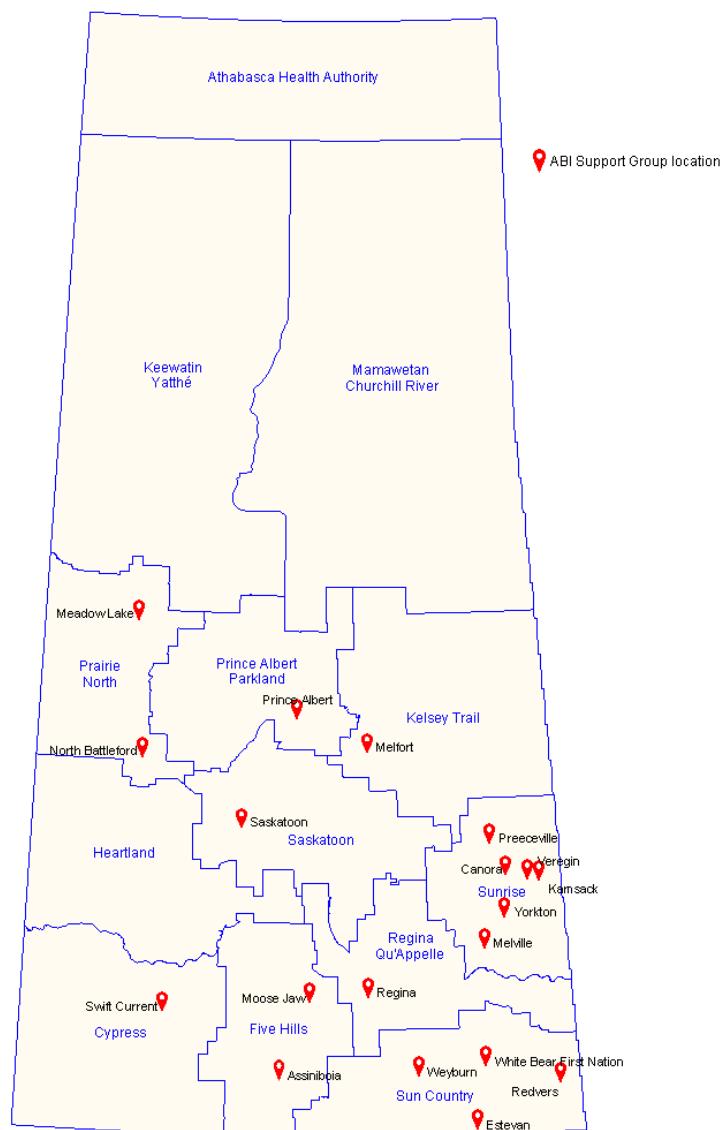


Support Group Attendee

Support groups serve as an important venue for long-term support after survivors and/or their families have moved on from active involvement in other ABI services.

Support Group locations

During the first two years of this contract (April 2013 to March 2015), support groups have been offered in the following locations: Assiniboia, Canora, Estevan, Kamsack, Meadow Lake, Melfort, Melville, Moose Jaw, North Battleford, Preeceville, Prince Albert, Redvers, Regina (both survivor and family-only support groups offered by SBIA), Saskatoon (including Parent Knowledge Exchange developed by Radius), Swift Current, Verigin, Weyburn, White Bear First Nation and Yorkton (see map below).



In order to promote the ABI Support Groups, a listing page is on the ABI Partnership website: http://www.abipartnership.sk.ca/html/abi-survivors-and-families/Local_Support_Groups/index.cfm.

Support Group Activities recorded in ABIIS

There were 930 events delivered to groups of ABI Survivors, their families, or both in 2013-14 and 2014-15. Support groups made up 39% of these events, and another 12% were activities, while not delivered in the traditional support group format, still provide education and support to participants (e.g., Radius' Parent Knowledge Exchange). You can see the support group activities recorded in Table 28.

Table 28: Support Group Activities recorded in the 2013-14 and 2014-15 Fiscal Year

Type of Group	Sum of Service Hours	Number of Events	Sum of # of Attendees
Support Group	786	367	3,220
Survivor/Family Support (Not Support Group)	264	113	20,212
Grand Total	1,051	480	23,432



"I get support from [my ABI support group] which I continue to attend. I also appreciate knowing that even though my file is closed that ABI will be more than willing to help me in the future should the need arise."

ABI Outreach Team Client & Support Group Attendee



Support Group Conclusions

As the above table demonstrates, a large number of survivors and their families benefit from support group attendance and this service delivery option will continue to be offered to address the need for education and support provided by them.

CONCLUSION

Limitations

Before drawing conclusions regarding the findings of the current report, certain limitations must be addressed:

- The examination of client improvement via the MPAI-4 was quasi-experimental as improvement could not be compared to the improvement that would naturally occur for survivors without the Partnership services (i.e., there was no control group).
- There may be slight variations in the data provided by different service providers where ambiguity exists as to where and how to enter certain types of information into ABIIS.
- And finally, the findings from this report come from internal evaluation processes of our funded agencies and those employed to project manage the ABI Partnership Project, and therefore have biases regarding the success of the Partnership.

Thus, conclusions should be viewed with these limitations in mind.

Conclusion

The ABI Partnership Project remains a unique, comprehensive, integrated system of community-based ABI services and resources in Saskatchewan. Through a sound service delivery philosophy built on ongoing evaluation processes, effective project management, quality support services as well as education and prevention activities the Partnership remains innovative and responsive in our service delivery to ABI survivors, their families and their communities.

We continue to deliver a range of services across the province to meet the needs of our clients. This is demonstrated in high service volumes in direct client service and consultations, as well as education and prevention activities that span communities across the province.

Our client outcome tools show that programs are helping clients to achieve their goals with good levels of functional improvement.

Through their site-level evaluations our service providers sought feedback from their clients and service partners about the impact of their services and found overall satisfaction with the services that they provide.

Education about brain injury and the prevention of it, to further the understanding of the public, has been a key role of our education and prevention programs. Our solid investments in educating communities about brain injury will continue - the only cure for a brain injury is prevention.

UPDATE ON 2010 – 2012 EVALUATION RECOMMENDATIONS

Quality Improvements

The ABI Provincial Office should:

- i) **Continue to liaise with front-line staff to make improvements to the Acquired Brain Injury Information System (ABIIS).**

On March 1, 2013, numerous revisions were made to ABIIS codes and ABIIS coding procedures to reduce redundancy, improve clarity on which code to use when, and to give an improved picture of the work done with families and other service providers on a client's behalf. In addition, a living document called "Frequently Asked Questions (FAQs) on the ABIIS" was drafted and posted on the ABI Partnership website's private pages for staff in June 2015. This document will be continually updated.

Client Outcomes

The ABI Provincial Office should:

- i) liaise with front-line staff to review the current client outcome tools and update the goal attainment template to better capture cognitive/behavioural goals.

The Outcomes Working Group consisting of six ABI Partnership front-line service providers was convened to look at the Goal Attainment tool. With the input from this group, a new Goal Attainment Template was drafted that better captures cognitive and behavioural goals, and additionally, better aligns with the ABI Partnership's other provincial outcome measure: the Mayo-Portland Adaptability Inventory – Fourth Edition. This tool was disseminated in May 2013.

Family Support

The ABI Partnership should:

- i) Continue to assess the needs of family and work to better address them through programming options tailored to them.
- ii) Encourage front-line staff to address family needs, independent of survivors, where applicable/appropriate.

Programs funded by the ABI Partnership Project are continually encouraged to work with families, and if relevant to their program mandate, offer assistance to families separate from the needs of the ABI survivor. Other work done to address the needs of families this contract period include:

- *The 2013 Brain Trust featured keynote speaker Dr. Jeffrey Kreutzer who presented on the changes experienced by family members, and ways to assist them.*
- *In conjunction with Brain Trust 2013, funded programs who work with families were invited to attend an additional workshop after the conference. In this workshop, Dr. Kreutzer presented an intensive session on "The Brain Injury Family Intervention" (BIFI) – a manualized intervention he founded on cognitive behavioral and family systems counseling theories which promotes effective coping strategies for families experiencing significant emotional and behavioral changes post-injury.*
- *In conjunction with Brain Trust 2013, Dr. Kreutzer also presented "Bouncing Back after Brain Injury: A Family Guide". This session occurred in Regina and was open to adult family members, spouses, caregivers, and friends of brain injury survivors. In this session information on brain injury, families and marriage, resilience, and practical approaches for overcoming challenges was presented. Evaluation of this session was overwhelmingly positive, with Dr. Kreutzer receiving an overall rating of 4.22 (out of 5).*

Communications: Website

The ABI Partnership should:

- i) ensure content is updated on a regular basis and relevant links are added.

The website's content continues to be updated with event information and relevant resources on an ongoing basis. One highlight was the addition of the Introduction to ABI Online Presentation Series in August 2014.

- ii) encourage funded agency use of the website forum for clinical discussion and knowledge exchange.

The website was updated in March 2013 to include private pages that staff can view with their sign-on information. These pages are easier to navigate than the old forum. The website was also updated in the summer of 2014 to be easier to navigate for public users.

Service Awareness and Access

REFERRAL MAPPING

The ABI Partnership should:

- i) Work with front-line service providers to document our referral processes within and outside the Partnership.

The ABI Provincial Office and Outreach Team managers worked together to develop a referral map that indicates typical referral agencies, the referral process, and types of assistance that clients can expect from ABI Outreach Teams. Refer to Appendix A: Outreach Team Intake Pathway on page 121.

- ii) Encourage and facilitate proactive linkages (including referral processes and resource distribution) between acute care and the ABI Partnership.

This is ongoing work done by the ABI Outreach Teams.

CONFIRMATION OF MODERATE TO SEVERE BRAIN INJURY

In order to ensure that we continue to meet the needs of our mandated target population (moderate to severe brain injured individuals), the ABI Provincial Office, in partnership with the three outreach teams, should:

- i) develop and disseminate a protocol for other funded agencies to obtain support from/consult with Outreach Team managers where confirmation of moderate to severe brain injury cannot be easily ascertained.

The ABI Provincial Office and Outreach Team managers produced this protocol. It was distributed to all agencies in February 2013 and language around its use was included in this contract's service schedules.

Education

STAFF ORIENTATION

The ABI Partnership should:

- i) Review existing staff orientation resources, explore alternate delivery methods, and develop new and/or improved staff orientation resources/processes where needed.**

In partnership with a funded position in PA Parkland Health Region, the ABI Provincial Office began work in the 2013-16 contract period to develop on-line training modules to be available on our website: www.abipartnership.sk.ca - beginning with the "Introduction to ABI Online Presentation Series" launched in August 2014. The aim is to increase timely provincial access to ABI educational information for our funded agency staff, human service providers working with individuals with brain injuries, as well as ABI survivors and their families.

- ii) investigate developing mentorship opportunities as part of this.**

A mentorship program was developed and launched in 2013. The roster of mentors is updated annually.

STAFF TRAINING

The ABI Provincial Office, in partnership with other community-based organizations and health regions, should facilitate and support Partnership staff attendance at relevant in-services/training sessions. Based on the August 2009 Staff Survey feedback as well as the external evaluation recommendations, specific sessions to support include:

- i) continue to investigate and facilitate educational opportunities around best practices to better serve Aboriginal clients and communities.**

Motivational interviewing is seen as an effective way to engage individuals from minority groups [30-31], as well as those with an ABI [32]. As indicated in the point below, Motivational Interviewing training was advertised and sponsored this contract period. In addition to this training, investigation into best practices to better serve Aboriginal clients and communities is ongoing.

- ii) advertise upcoming motivational interviewing training sessions and support ABI Partnership staff attendance.**

The Education and Prevention Coordinator has informed ABI Partnership staff of motivational interviewing training sessions in their areas offered by the Saskatchewan Prevention Institute throughout this contract period. In May of 2015, a dedicated session for ABI staff on motivational interviewing was sponsored by the ABI Partnership, and presented by the Saskatchewan Prevention Institute.

iii) poll staff and arrange for a refresher course on privacy legislation and client information-sharing, if staff interest determines that this is wanted.

There was not sufficient staff interest in a privacy legislation course, as indicated in a staff survey conducted in 2012.

iv) plan to deliver a Brain Trust focused on difficult behaviours in fall 2012.

Brain Trust 2012 featured presentations by Dr. Muir Giles, and focused on difficult behaviours.

v) offer education sessions in more of a regional workshop format.

Brain Trust has continued to be offered in a provincial format. However, many regional training opportunities have been sponsored this contract period:

- *May 2013: A one-day telehealth was broadcast throughout the province on survivors' goal-setting around independent living skills development.*
- *January 2015: A plain language workshop was delivered on developing materials that will engage and be understood by the public.*
- *May 2015: Dr. Shawn Marshall presented, "The Revised Guidelines for the Management of Mild Traumatic Brain Injury and Persistent Post-Concussive Symptoms" through telehealth Grand Rounds.*

2013 – 2015 EVALUATION RECOMMENDATIONS

EDUCATION AND PREVENTION

1. As referenced in two prior provincial evaluation reports [8,9], continued efforts should be made to liaise and develop injury prevention strategies/programming for underserved communities and groups.

STAFF TRAINING

2. The ABI Provincial Office should:
 - a. Continue to look at innovative ways to deliver training to a wide geographical area through alternative technologies (e.g., webinars), and explore alternative ways of education delivery and professional development training (e.g., Brain Trust)
 - b. Continue to investigate and facilitate educational opportunities around best practices to better serve ABI clients and communities including sub-populations with special needs.

PROMOTION

3. The ABI Provincial Office should:
 - a. continue to ensure website content is updated on a regular basis and relevant links are added, and
 - b. undertake additional promotion of our new website content (including our new “Introduction to ABI Online Series”), both to ABI Partnership programs and to a wider audience.

ABI INFORMATION SYSTEM (ABIIS)

4. The ABI Provincial Office should continue to liaise with front-line staff to make improvements to the ABIIS.

CLIENT OUTCOME TOOLS

5. The ABI Provincial Office should:
 - a. Review provincial outcome tools in light of new methods and those used in programs' site-level evaluations.
 - b. Explore alternative ways of providing training/education on provincial outcome measures in use.

FAMILY SUPPORT

6. The ABI Provincial Office should continue to encourage funded agencies to recognize the needs of and tailor services to families (independent of survivors, as necessary).

GIVING ABI VOICE TO INTERSECTORAL INITIATIVES

7. The ABI Provincial Office will continue to give voice to the service needs of individuals with ABI and their families as they relate to service implementation plans of current service initiatives that might positively impact them.

Bibliography

1. **Murray C, Lopez A.** Global Health Statistics: A Compendium of Incidence, Prevalence and Mortality Estimates for over 200 Conditions. Cambridge: Harvard University Press; 1996.
2. **Lannin N, Henry K, Turnbull M, Elder M, Campisi J.** An Australian Survey of the Clinical Practice Patterns of Case Management for Clients with Brain Injury. *Brain Impairment* 2012;13: 228-237.
3. **Leith KH, Phillips L, Sample PL.** Exploring the service needs and experiences of persons with TBI and their families: the South Carolina experience. *Brain Injury* 2004;18: 1191-1208.
4. **Lefebvre H, Cloutier G, Levert MJ.** Perspectives of survivors of traumatic brain injury and their caregivers on long-term social integration. *Brain Injury* 2008;22: 535-543.
5. **Acquired Brain Injury Working Group.** Acquired Brain Injury: A Strategy for Services. Regina: Government of Saskatchewan; 1995.
6. **Acquired Brain Injury Partnership Project.** Acquired Brain Injury: A Strategy for Services. Program Evaluation Report. Regina: Government of Saskatchewan; 1998.
7. **Acquired Brain Injury Partnership Project.** Summary of Key Findings. ABI Partnership Project: 5-year Evaluation. Regina: Government of Saskatchewan; 2004.
8. **Acquired Brain Injury Partnership Project.** Acquired Brain Injury Partnership Project: Program Evaluation 2004-06. Regina: Government of Saskatchewan; 2006.
9. **Acquired Brain Injury Partnership Project.** Acquired Brain Injury Partnership Project: 2007-10 Program Review. Regina: Government of Saskatchewan; 2009.
10. **Acquired Brain Injury Partnership Project.** Acquired Brain Injury Partnership Project: 2010-12 Program Review. Regina: Government of Saskatchewan; 2012.
11. **Laurence Thompson Strategic Consulting.** Evaluation of the Saskatchewan Acquired Brain Injury Partnership's general services. Saskatoon: Laurence Thompson Strategic Consulting; 2011.

12. **R.A. Malatest & Associates Ltd.** Evaluation of the ABI Partnership Project's Service Delivery Model for Difficult to Serve Populations. Edmonton: R.A. Malatest & Associates Ltd.; 2012.
13. **BC Injury Research and Prevention Unit.** Review of International Best-Practices for Improving Child Passenger Safety and Evaluation of Saskatchewan's Program. Vancouver: BC Injury Research and Prevention Unit; 2012.
14. **McDermott GL, McDonnell AM.** Acquired brain injury services in the Republic of Ireland: Experiences and perceptions of families and professionals. *Brain Injury*, 2014;28, 81-91.
15. **Malec J.** Manual for the Mayo-Portland Adaptability Inventory (MPAI-4) for Adults, Children and Adolescents. San Jose: www.tbims.org [Published 2008; Cited: February 11, 2015] Available from: <http://www.tbims.org/combi/mpai>.
16. **Malec J, Lezak J.** Relationship of the Mayo-Portland Adaptability Inventory to functional outcome and cognitive performance measures. *Journal of Health Trauma Rehabilitation* 1994;9, 1-15.
17. **Lamontagne ME, Swaine BR, Lavoie A, Careau E.** Analysis of the strengths, weaknesses, opportunities and threats of the network form of organization of traumatic brain injury delivery systems. *Brain Injury*, 2011;25, 1188-1197.
18. **McLean AM, Jarus T, Hubley AM, Jongbloed L.** Associations between social participation and subjective quality of life for adults with moderate to severe traumatic brain injury. *Disability and Rehabilitation*, 2014;17, 1409-1418.
19. **Canadian Institute for Health Information (CIHI).** National Trauma Registry: 2006 Injury Hospitalization Highlights Report. Ottawa: [www.cihi.ca](https://secure.cihi.ca/free_products/ntr_highlights_2006_en.pdf) [Published 2007; Cited July 29, 2015] Available from:
https://secure.cihi.ca/free_products/ntr_highlights_2006_en.pdf
20. **Parachute.** The Cost of Injury in Canada. Toronto: Parachute, 2015.
21. **Vogler J, Klein AM, Bender A.** Long-term health-related quality-of-life in patients with acquired brain injury and their caregivers. *Brain Injury*, 2014;28, 1381-1388.
22. **Hollander MJ, Liu G, Chappell NL.** Who cares and how much? The imputed economic contribution to the Canadian healthcare system of middle-aged and older unpaid caregivers providing care to the elderly. *Healthcare Quarterly*, 2009;12, 42-49.

23. **Simpson G, Jones K.** How important is resilience among family members supporting relatives with traumatic brain injury or spinal cord injury? *Clinical Rehabilitation* 2012;27, 367-377.
24. **O'Callaghan AM, McAllister L, Wilson L.** Experiences of care: Perspectives of carers of adults with traumatic brain injury. *International Journal of Speech-Language Pathology* 2011;13 218-226.
25. **Turner BJ, Fleming J, Ownsworth T, Cornwell P.** Perceived service and support needs during transition from hospital to home following acquired brain injur. *Disability and Rehabilitation* 2011;33, 818-829.
26. **Singer G, et al.** A comparison of two psychosocial interventions for parents of children with acquired brain injury: An exploratory study. *Journal of Head Trauma Rehabilitation* 1994;9, 38-49.
27. **Crabtree J, Haslam S, Postmes T, Haslam C.** Mental health support groups, stigma, and self-esteem: Positive and negative implications of group identification. *Journal of Social Issues* 2010;66, 553-569.
28. **Hibbard, M. et al.** Peer support in the community: Initial findings of a mentoring program for individuals with traumatic brain injury and their families. *Journal of Head Trauma Rehabilitation* 2002;17, 112-131.
29. **Breneé.** Benefits from a Brain Injury Support Group - A Survivor's Story. Oklahoma: www.braininjuryoklahoma.org [cited: June 3, 2015]. Available from: <http://www.braininjuryoklahoma.org/survivors/69-brennee-story.html>.
30. **Hettema J, Miller W.** Motivational Interviewing. *Annual Review of Clinical Psychology* 2005;1, 91-111.
31. **Lundahl BW, Kunz C, Brownell C, Tollefson D, Burke BL.** A Meta-Analysis of Motivational Interviewing: Twenty-Five Years of Empirical Studies. *Research on Social Work Practice* 2010;20, 137-160
32. **Hsieh M, Ponsford J, Wong D, Schönberger M, Taffe J, McKay A.** Motivational interviewing and cognitive behaviour therapy for anxiety following traumatic brain injury: a pilot randomised controlled trial. *Neuropsychology Rehabilitation* 2012;22, 585-608.

Appendix A: Outreach Team Intake Pathway

Acquired Brain Injury Outreach Teams

Referral Sources:

- 1) Hospital Units:
 - acute care
 - inpatient rehabilitation
 - outpatient rehabilitation
- 2) Other Health Care Professionals
- 3) Client or Family Member

Note: ABI Outreach Teams also receive referrals from other sources such as SGL, Social Services, Justice Services, Long-Term Care/Special Care Homes, and Mental Health Services.

Referral Process:

Referral is made to ABI Outreach Team through phone, fax, paper mail, or in-person.

Referral form is completed. This form includes basic demographic information and injury specifics such as date of injury and location of hospitalization.

Medical records are accessed by the ABI Outreach Team

Medical records indicate a moderate to severe brain injury

Medical records indicate a mild brain injury

Medical records do not indicate a brain injury

Client is accepted into the Outreach Program

Client is referred to Case Manager for:
1) Needs Assessment, and 2) Goal Setting

Some of the specific services ABI Outreach Teams can offer include:

- Education on ABI and how it affects function
- Assistance with navigation of various systems/resources (medical/financial/other)
- Coordination of community resources
- Collaboration with client & various organizations/programs
- Assistance with return to work, return to school, return to leisure activities
- Assistance with in home functioning (ADL's through assessment, coping strategies, accessing resources and assistive aids)

Client is referred to the Team's Education and Prevention Coordinator for information on mild brain injury/concussion.

Client is not accepted into the Outreach Program. The client/ referring agency is informed of the decision. Recommendations for follow-up by appropriate services are made, if applicable.

Clients are referred to other programs as needed. Examples include:

- Funding Resources
- Mental Health Services
- Other Health Care Professionals
- Residential Services
- Community Services
- LTC / Special Care Homes
- Rehab Services
- Vocational / Avocational services
- Justice/Legal/ Police Services
- Aboriginal Community
- Addiction Services
- Recreational & Leisure Services
- SGI
- ABI Partnership Programs

See the ABI Partnership website:
www.abipartnership.sk.ca

Our Mission is to provide individual and family support to people with acquired brain injury so that they may live successfully in their communities with improved quality of life. Each Outreach Team consists of a variety of rehabilitation professionals experienced in the field of acquired brain injury.

For more information, please contact the team responsible for your health region.

Sask North ABI Outreach Team: 1(866) 899-9951

Sask Central ABI Outreach Team: 1(888) 868-8717

Sask South ABI Outreach Team: 1(866) 766-5617

Appendix B: Mayo-Portland Adaptability Inventory-4

Mayo-Portland Adaptability Inventory-4

Muriel D. Lezak, PhD, ABPP & James F. Malec, PhD, ABPP

HSN: _____

Program Name: _____

Intake

18 months/ Discharge

Date: _____

Person reporting (circle one): Single Professional Professional Consensus Person with brain injury Significant other: _____

Below each item, circle the number that best describes the level at which the person being evaluated experiences problems. Mark the greatest level of problem that is appropriate. Problems that interfere rarely with daily or valued activities, that is, less than 5% of the time, should be considered not to interfere. Write comments about specific items at the end of the rating scale.

For Items 1-20, please use the rating scale below.

0 None	1 Mild problem but does not interfere with activities; may use assistive device or medication	2 Mild problem; interferes with activities 5-24% of the time	3 Moderate problem; interferes with activities 25-75% of the time	4 Severe problem; interferes with activities more than 75% of the time
--------	---	--	---	--

Part A. Abilities

1. **Mobility:** Problems walking or moving; balance problems that interfere with moving about

0 1 2 3 4

2. **Use of hands:** Impaired strength or coordination in one or both hands

0 1 2 3 4

3. **Vision:** Problems seeing; double vision; eye, brain, or nerve injuries that interfere with seeing

0 1 2 3 4

4. ***Audition:** Problems hearing; ringing in the ears

0 1 2 3 4

5. **Dizziness:** Feeling unsteady, dizzy, light-headed

0 1 2 3 4

6. **Motor speech:** Abnormal cleanness or rate of speech; stuttering

0 1 2 3 4

7A. **Verbal communication:** Problems expressing or understanding language

0 1 2 3 4

7B. **Nonverbal communication:** Restricted or unusual gestures or facial expressions; talking too much or not enough; missing nonverbal cues from others

0 1 2 3 4

8. **Attention/Concentration:** Problems ignoring distractions, shifting attention, keeping more than one thing in mind at a time

0 1 2 3 4

9. **Memory:** Problems learning and recalling new information

0 1 2 3 4

10. **Fund of Information:** Problems remembering information learned in school or on the job; difficulty remembering information about self and family from years ago

0 1 2 3 4

11. **Novel problem-solving:** Problems thinking up solutions or picking the best solution to new problems

0 1 2 3 4

12. **Visuospatial abilities:** Problems drawing, assembling things, route-finding, being visually aware on both the left and right sides

0 1 2 3 4

Part B. Adjustment

13. **Anxiety:** Tense, nervous, fearful, phobias, nightmares, flashbacks of stressful events

0 1 2 3 4

14. **Depression:** Sad, blue, hopeless, poor appetite, poor sleep, worry, self-criticism

0 1 2 3 4

15. **Irritability, anger, aggression:** Verbal or physical expressions of anger

0 1 2 3 4

16. ***Pain and headache:** Verbal and nonverbal expressions of pain; activities limited by pain

0 1 2 3 4

17. **Fatigue:** Feeling tired; lack of energy; tiring easily

0 1 2 3 4

18. **Sensitivity to mild symptoms:** Focusing on thinking, physical or emotional problems attributed to brain injury; rate only how concern or worry about these symptoms affects current functioning over and above the effects of the symptoms themselves

0 1 2 3 4

19. **Inappropriate social interaction:** Acting childish, silly, rude, behavior not fitting for time and place

0 1 2 3 4

20. **Impaired self-awareness:** Lack of recognition of personal limitations and disabilities and how they interfere with everyday activities and work or school

0 1 2 3 4

Use scale at the bottom of the page to rate item #21

21. **Family/significant relationships:** Interactions with close others; describe stress within the family or those closest to the person with brain injury; "family functioning" means cooperating to accomplish those tasks that need to be done to keep the household running

0 Normal stress within family or other close network of relationships	1 Mild stress that does not interfere with family functioning	2 Mild stress that interferes with family functioning 5-24% of the time	3 Moderate stress that interferes with family functioning 25-75% of the time	4 Severe stress that interferes with family functioning more than 75% of the time
---	---	---	--	---

Part C: Participation

22. Initiation: Problems getting started on activities without prompting

0 None	1 Mild problem but does not interfere with activities; may use assistive device or medication	2 Mild problem; interferes with activities 5-24% of the time	3 Moderate problem; interferes with activities 25-75% of the time	4 Severe problem; interferes with activities more than 75% of the time
--------	---	--	---	--

23. Social contact with friends, work associates, and other people who are not family, significant others, or professionals

0 Normal involvement with others	1 Mild difficulty in social situations but maintains normal involvement with others	2 Mildly limited involvement with others (75-95% of normal interaction for age)	3 Moderately limited involvement with others (25-74% of normal interaction for age)	4 No or rare involvement with others (less than 25% of normal interaction for age)
----------------------------------	---	---	---	--

24. Leisure and recreational activities

0 Normal participation in leisure activities for age	1 Mild difficulty in these activities but maintains normal participation	2 Mildly limited participation (75-95% of normal participation for age)	3 Moderately limited participation (25-74% of normal participation for age)	4 No or rare participation (less than 25% of normal participation for age)
--	--	---	---	--

25. Self-care: Eating, dressing, bathing, hygiene

0 Independent completion of self-care activities	1 Mild difficulty, occasional omissions or mildly slowed completion of self-care; may use assistive device or require occasional prompting	2 Requires a little assistance or supervision from others (5-24% of the time) including frequent prompting	3 Requires moderate assistance or supervision from others (25-75% of the time)	4 Requires extensive assistance or supervision from others (more than 75% of the time)
--	--	--	--	--

26. Residence: Responsibilities of independent living and homemaking (such as, meal preparation, home repairs and maintenance, personal health maintenance beyond basic hygiene including medication management) but not including managing money (see #29)

0 Independent; living without supervision or concern from others	1 Living without supervision but others have concerns about safety or managing responsibilities	2 Requires a little assistance or supervision from others (5-24% of the time)	3 Requires moderate assistance or supervision from others (25-75% of the time)	4 Requires extensive assistance or supervision from others (more than 75% of the time)
--	---	---	--	--

27. *Transportation

0 Independent in all modes of transportation including independent ability to operate a personal motor vehicle	1 Independent in all modes of transportation, but others have concerns about safety	2 Requires a little assistance or supervision from others (5-24% of the time); cannot drive	3 Requires moderate assistance or supervision from others (25-75% of the time); cannot drive	4 Requires extensive assistance or supervision from others (more than 75% of the time); cannot drive
--	---	---	--	--

28A. *Paid Employment: Rate either item 28A or 28B to reflect the primary desired social role. Do not rate both. Rate 28A if the primary social role is paid employment. If another social role is primary, rate only 28B. For both 28A and 28B, "support" means special help from another person with responsibilities (such as, a job coach or shadow, tutor, helper) or reduced responsibilities. Modifications to the physical environment that facilitate employment are not considered as support.

0 Full-time (more than 30 hrs/wk) without support	1 Part-time (3 to 30 hrs/wk) without support	2 Full-time or part-time with support	3 Sheltered work	4 Unemployed; employed less than 3 hours per week
---	--	---------------------------------------	------------------	---

28B. *Other employment: Involved in constructive, role-appropriate activity other than paid employment.

Check only one to indicate primary desired social role: Childrearing/care-giving Homemaker, no childrearing or care-giving Student, Volunteer, Retired (Check retired only if over age 60; if unemployed, retired as disabled and under age 60, indicate "Unemployed" for item 28A.)

0 Full-time (more than 30 hrs/wk) without support; full-time course load for students	1 Part-time (3 to 30 hrs/wk) without support	2 Full-time or part-time with support	3 Activities in a supervised environment other than a sheltered workshop	4 Inactive; involved in role appropriate activities less than 3 hours per week
---	--	---------------------------------------	--	--

29. Managing money and finances: Shopping, keeping a check book or other bank account, managing personal income and investments; if independent with small purchases but not able to manage larger personal finances or investments, rate 3 or 4.

0 Independent, manages small purchases and personal finances without supervision or concern from others	1 Manages money independently but others have concerns about larger financial decisions	2 Requires a little help or supervision (5-24% of the time) with large finances; independent with small purchases	3 Requires moderate help or supervision (25-75% of the time) with large finances; some help with small purchases	4 Requires extensive help or supervision (more than 75% of the time) with large finances; frequent help with small purchases
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Part D: Pre-existing and associated conditions. The items below do not contribute to the total score but are used to identify special needs and circumstances. For each rate, pre-injury and post-injury status.

30. Alcohol use: Use of alcoholic beverages.

Pre-injury _____ Post-injury _____

0 No or socially acceptable use	1 Occasionally exceeds socially acceptable use but does not interfere with everyday functioning; current problem under treatment or in remission	2 Frequent excessive use that occasionally interferes with everyday functioning; possible dependence	3 Use or dependence interferes with everyday functioning; additional treatment recommended	4 Inpatient or residential treatment required
---------------------------------	--	--	--	---

31. Drug use: Use of illegal drugs or abuse of prescription drugs.

Pre-injury _____ Post-injury _____

0 No or occasional use	1 Occasional use does not interfere with everyday functioning; current problem under treatment or in remission	2 Frequent use that occasionally interferes with everyday functioning; possible dependence	3 Use or dependence interferes with everyday functioning; additional treatment recommended	4 Inpatient or residential treatment required
------------------------	--	--	--	---

32. Psychotic Symptoms: Hallucinations, delusions, other persistent severely distorted perceptions of reality.

Pre-injury _____ Post-injury _____

0 None	1 Current problem under treatment or in remission; symptoms do not interfere with everyday functioning	2 Symptoms occasionally interfere with everyday functioning but no additional evaluation or treatment recommended	3 Symptoms interfere with everyday functioning; additional treatment recommended	4 Inpatient or residential treatment required
--------	--	---	--	---

33. Law violations: History before and after injury.

Pre-injury _____ Post-injury _____

0 None or minor traffic violations only	1 Conviction on one or two misdemeanors other than minor traffic violations	2 History of more than two misdemeanors other than minor traffic violations	3 Single felony conviction	4 Repeat felony convictions
---	---	--	----------------------------	-----------------------------

34. Other condition causing physical impairment: Physical disability due to medical conditions other than brain injury, such as, spinal cord injury, amputation. Use scale below #35.

Pre-injury _____ Post-injury _____

35. Other condition causing cognitive impairment: Cognitive disability due to non-psychiatric medical conditions other than brain injury, such as, dementia, developmental disability.

Pre-injury _____ Post-injury _____

0 None	1 Mild problem but does not interfere with activities; may use assistive device or medication	2 Mild problem; interferes with activities 5-24% of the time	3 Moderate problem; interferes with activities 25-75% of the time	4 Severe problem; interferes with activities more than 75% of the time
--------	---	--	---	--

Comments:

Item # _____

Demographic Information

ABI Partnership Project

Client Health Service Number (HSN): _____

Ethnicity: Metis Non Aboriginal Non Status Status Indian Unknown Inuit

Gender: female male

Cause of Injury:

- | | |
|--|---|
| <input type="checkbox"/> Aneurysm | <input type="checkbox"/> Motorcycle (passenger) |
| <input type="checkbox"/> Anoxia | <input type="checkbox"/> MVC (bicycle) |
| <input type="checkbox"/> Bicycle | <input type="checkbox"/> MVC (driver or passenger) |
| <input type="checkbox"/> Blow to head (assault) | <input type="checkbox"/> MVC (pedestrian) |
| <input type="checkbox"/> Blow to head (diving) | <input type="checkbox"/> Other (not TBI specify _____) |
| <input type="checkbox"/> Blow to head (not assault) | <input type="checkbox"/> Penetrating (missile wound) |
| <input type="checkbox"/> Blow to head (sports related) | <input type="checkbox"/> Shaken Baby Syndrome |
| <input type="checkbox"/> Encephalitis/Meningitis | <input type="checkbox"/> Stroke |
| <input type="checkbox"/> Fall | <input type="checkbox"/> Snowmobile |
| <input type="checkbox"/> Motorcycle (driver) | <input type="checkbox"/> Traumatic Brain Injury (other) |
| | <input type="checkbox"/> Tumour |

Age at time of Injury: _____

Years since injury: _____

Living Situation:

- | | |
|---|---|
| <input type="checkbox"/> Approved Home | <input type="checkbox"/> Independent in home or family home |
| <input type="checkbox"/> Correctional Centre | <input type="checkbox"/> Independent with difficulty |
| <input type="checkbox"/> No Fixed Address | <input type="checkbox"/> Long Term Care Facility |
| <input type="checkbox"/> Child no extra support | <input type="checkbox"/> Personal Care Home |
| <input type="checkbox"/> Child extra support | <input type="checkbox"/> Supported with limited assistance |
| <input type="checkbox"/> Group Home | <input type="checkbox"/> Supported requiring assistance |
| <input type="checkbox"/> Hospital Resident | <input type="checkbox"/> Supervised in home or family home |

Insurance:

- | | | | |
|---------------------------------------|--------------------------------|--|--|
| <input type="checkbox"/> No Insurance | <input type="checkbox"/> Other | <input type="checkbox"/> SGI No Fault | <input type="checkbox"/> SGI Tort (2003) |
| | | <input type="checkbox"/> SGI Tort (pre-1995) | <input type="checkbox"/> WCB |

Current Employment:

- | | |
|---|---|
| <input type="checkbox"/> Currently Medically Restricted | <input type="checkbox"/> Self Employed |
| <input type="checkbox"/> Full time Competitive | <input type="checkbox"/> Sheltered |
| <input type="checkbox"/> Homemaker | <input type="checkbox"/> Student |
| <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Supported |
| <input type="checkbox"/> Part time Competitive | <input type="checkbox"/> Transitional |
| <input type="checkbox"/> Retired | <input type="checkbox"/> Unemployable |
| <input type="checkbox"/> Seasonal Employment | <input type="checkbox"/> Unemployed |
| | <input type="checkbox"/> Volunteer Work |

Education Level:
(Highest Level)

- | | |
|--|---|
| <input type="checkbox"/> Elementary School | <input type="checkbox"/> Preschool/Kindergarten |
| <input type="checkbox"/> None | <input type="checkbox"/> Secondary School |
| <input type="checkbox"/> Post-Secondary School | |

Home Health Region:

- | | |
|--|---|
| <input type="checkbox"/> Athabasca | <input type="checkbox"/> Prairie North |
| <input type="checkbox"/> Cypress | <input type="checkbox"/> Prince Albert Parkland |
| <input type="checkbox"/> Five Hills | <input type="checkbox"/> Regina Qu'Appelle |
| <input type="checkbox"/> Heartland | <input type="checkbox"/> Saskatoon |
| <input type="checkbox"/> Kelsey Trail | <input type="checkbox"/> Sun Country |
| <input type="checkbox"/> Keewatin Yatthé | <input type="checkbox"/> Sunrise |
| <input type="checkbox"/> Mamawetan | <input type="checkbox"/> None |

Appendix C: Goal Attainment

Goal Summary for Clients Discharged/Inactivated in the Prior Fiscal Year						
PROGRAM NAME: _____		Number of clients reflected in Goal Summary: _____				
Goal Category	Goal Area	Corres-ponding MPAI-4 item	NUMBER OF GOALS			
			Achieved	Partially Achieved	Not Achieved	Withdrawn
ABILITY	Attention/Concentration	8				
	Communication/Language	6 and 7				
	Eating/Swallowing Skills	not in				
	Memory	9 and 10				
	Physical	1 to 5				
	Planning/ Problem Solving/ Self Correction	11				
	Visuospatial	12				
	Time-Awareness/Management	not in				
ADJUSTMENT	Other Ability					
	Anger Management	15				
	Behaviour Management	19				
	Fatigue Management	17				
	Mood Management	14				
	Pain Management	16				
	Self-Awareness/Insight	20				
	Sexuality	not in				
	Stress Management	13				
	Understanding ABI	not in				
PARTICIPATION	Other Adjustment					
	Child Rearing/Caregiving	28B				
	Community Involvement/Groups	23				
	Dressing/Grooming/Hygiene	25				
	Education	28B				
	Employment	28A				
	Handling money	29				
	Home Management	26				
	Initiation	22				
	Leisure Activities	24				
	Medication Management	26				
	Nutrition/Meal Prep	26				
	Relationships with others	21 and				
	Spirituality	not in				
	Transportation	27				
	Volunteering	28B				
	Other Volunteering					
PRE-EXISTING & ASSOCIATED CONDITIONS	Addictions	Part D				
	Crisis Intervention/Secondary Prevention	Part D				
	Other Pre-existing or Associated Conditions					
SYSTEM NAVIGATION	Advocacy	not in				
	Housing	not in				
	Navigating Financial system	not in				
	Navigating Justice/ Legal/Police system	not in				
	Navigating Medical system	not in				
	Other System Navigation					
	Housing	not in				
	Navigating Financial system	not in				
	Navigating Justice/ Legal/Police system	not in				
	Navigating Medical system	not in				
GRAND TOTALS			0	0	0	0