# 2019 – 2021 Program Review

Acquired Brain Injury Partnership Project



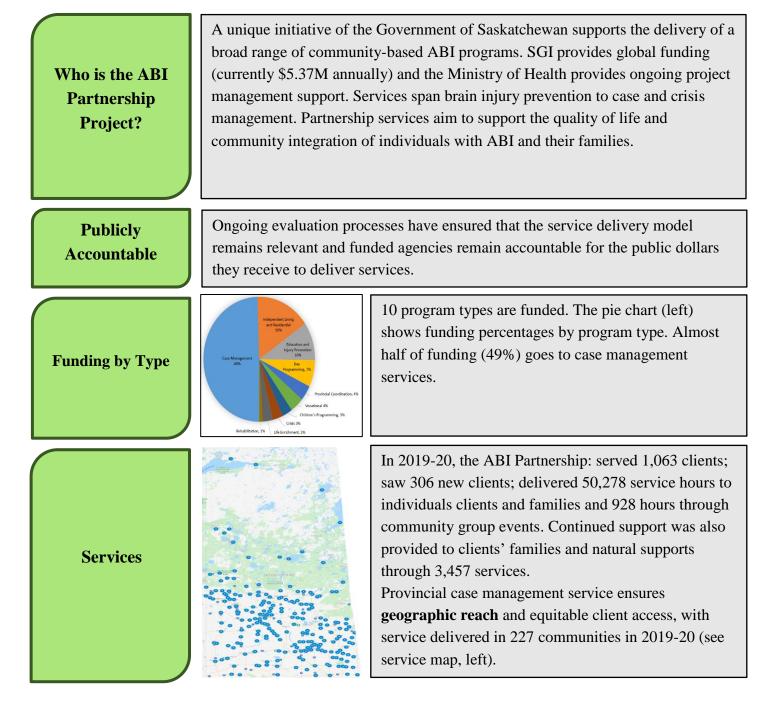


# CONTENTS

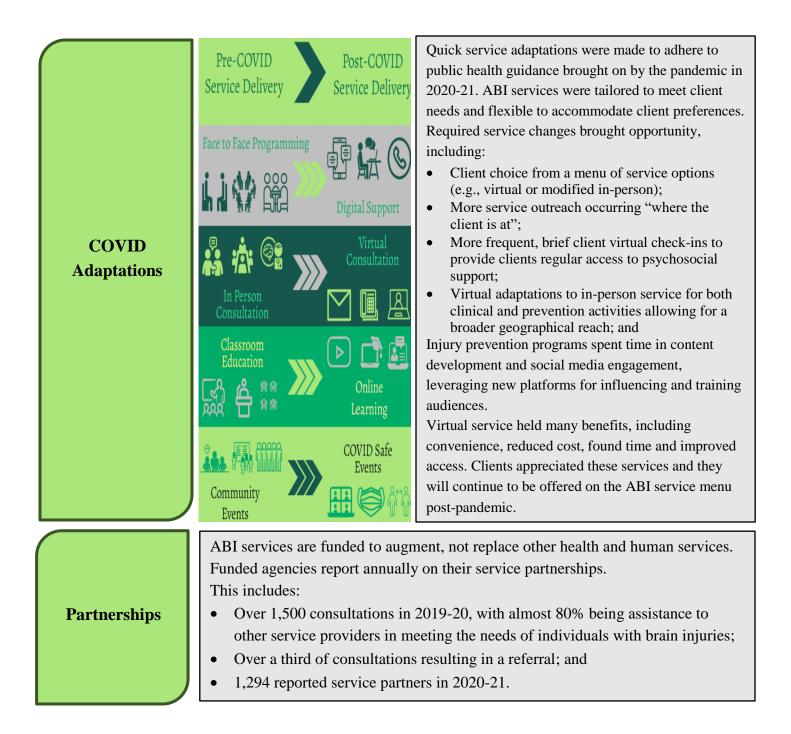
CONTENTS
EXECUTIVE SUMMARY
WHAT IS AN ABI
THE ABI PARTNERSHIP PROJECT9
ABOUT THE CURRENT REPORT
SUMMARY OF THE PROGRAMS FUNDED11
VALUING THE ABI PARTNERSHIP14
PROVINCIAL OVERVIEW – ALL SERVICES
PROVINCIAL OVERVIEW – DIRECT CLIENT SERVICE
PROGRAM TYPE SUMMARIES - DIRECT CLIENT SERVICE41
PROVINCIAL OVERVIEW – EDUCATION AND INJURY PREVENTION
PROGRAM TYPE SUMMARIES - EDUCATION AND INJURY PREVENTION
CONCLUSION
REFERENCES
APPENDIX A - COST BENEFIT METHODOLOGY91
APPENDIX B - MPAI-4 DATA TABLES96

## **Executive Summary**

The 2019-21 Acquired Brain Injury (ABI) Partnership Project (the ABI Partnership) Program Review summarizes ABI services delivered in the first two years of the 2019-22 contract. The main focus is on service events and activities that occurred in 2019-20 as a typical service year. 2020-21 data is presented in different ways, as COVID-related service modifications could not be fully captured under the traditional data categories. Key highlights of the report include:



Value	<ul> <li>Return on Investment (ROI) literature shows an expected \$38 of value for every \$1 spent on injury prevention. SGI's \$626K annual injury prevention programming investment translates into a \$23.8M ROI. Cost-benefit analysis suggests that for the \$4.4M SGI invests annually in ABI clinical services, it would cost \$10.4M to buy these services on the private market. Services would be difficult to replicate, as they are: <ul> <li>available throughout the province;</li> <li>flexible, individualized and comprehensive;</li> <li>delivered by a mature service network with 865 years of collective staff expertise; and</li> <li>enhanced by long-standing in-kind commitments; for every \$1 invested by SGI, ABI partners invest an additional 68 cents to support services.</li> </ul> </li> <li>Motor vehicle collision (MVC) clients directly benefit as they spend more time in services than other injury causes served; current MVC clients started ABI programming an average of 8.4 years ago, 2.7 years longer than individuals injured by other causes.</li> </ul>				
Client Outcomes	<ul> <li>Outcome measures show marked improvement after client involvement with ABI programs:</li> <li>91% of client goals were achieved; and</li> <li>90% of clients have fewer challenges as shown by their Mayo-Portland Adaptability Inventory ratings.</li> </ul>				
Education & Prevention	<ul> <li>Education and prevention programs focus on broadening both the public's and professionals' understanding of brain injury.</li> <li>The breadth of this reach is seen through: <ul> <li>Large audience attendance at Education and Prevention events delivered across Saskatchewan in 2019-20 (see map, left);</li> <li>Initiatives targeting at-risk populations such as school-based programs for children &amp; youth;</li> <li>Partnerships with First Nations bands and tribal councils to address the high injury rates and educational needs specific to Indigenous communities;</li> <li>\$2.35M Traffic Safety &amp; Injury Prevention grants awarded to 273 communities since 1997;</li> <li>Training sponsorships for ABI staff in areas of clinical relevance such as Canadian Indigenous Culture Training, Motivational Interviewing and Cognitive Rehabilitation.</li> </ul> </li> </ul>				



The ABI program...is a great "follow up" for unmet needs when many clients return home. Navigating the health system can be overwhelming and the ABI program has supported clients as they walk the path (and) has also supported clients who would often "slip between the cracks". It is a resource like no other in our health system...clients are fortunate to have an open door in that program that they can turn to.

~ABI Service Partner~

## What is an ABI

#### QUICK FACTS[1,2,7]:

- ABI is the leading cause of death and disability globally and for Canadians under the age of 40.
- The incidence of ABI is rising and outnumbers breast cancer, spinal cord injury, multiple sclerosis, and HIV/AIDS combined.
- Approximately 160,000 Canadians sustain ABIs each year.
- 1.5 million Canadians are estimated to be living with an ABI.
- Falls and transport incidents are the top 2 TBI injury causes in Saskatchewan and also incur the highest injury costs for the province.

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

The brain injury survival rate has dramatically increased in recent decades with advances in medical technology and emergency response. Because of the complex physical, cognitive, psychological, and psychosocial impairments that often result, many individuals who sustain serious brain injuries require long-term service and support – some for the rest of their lives<sup>[3-5]</sup>.

An ABI refers to damage to the brain that occurs after birth. The damage may be caused by a traumatic injury to the head associated with an external force such as a motor vehicle collision, fall, assault or sports injury, or a non-traumatic injury cause such as a tumour, aneurysm, stroke, anoxia, or an infection<sup>[6]</sup>.

#### **CONSEQUENCES OF ACQUIRED BRAIN INJURY**

There are multiple consequences of moderate to severe ABI, with many resulting in long-lasting and life-long disability. The severity of these consequences depends on the injured area of the brain, but can include<sup>[8]</sup>:

- Cognitive difficulties with: attention, concentration, distractibility, memory, speed of mental processing, confusion, perseveration, impulsiveness, language processing, decision-making and problem-solving
- Speech and language difficulties such as: difficulty speaking, difficulty understanding the spoken word, slurred speech, problems with reading and writing
- Sensory and perceptual difficulties with: interpretation of touch, temperature, movement, limb position, and with the integration or patterning of sensory impressions into psychologically meaningful data

- Physical difficulties with: vision, hearing, taste, smell, seizures, limb weakness, paralysis or spasticity, loss of balance/coordination, chronic pain, sleep disorders, loss of stamina/extreme fatigue, bowel and bladder control, menstruation difficulties
- Social-emotional difficulties with: dependent behaviours, inappropriate emotions, lack of motivation, irritability, aggression, anxiety and depression, disinhibition, lack of insight/awareness

These consequences negatively impact ABI survivors' quality of life, family dynamics and peer relationships, as well as their prospects for return to work or school. All affect survivors' overall community participation and reintegration<sup>[9]</sup>. Some life areas prominently impacted by these ABI consequences are outlined below.

Fatigue	General fatigue is one of the most common problems reported by ABI survivors <sup>[10,11]</sup> with one study indicating as many as 70% of TBI survivors complained of mental fatigue <sup>[12]</sup> . The ability to successfully reintegrate into community life, including return to school and work is often significantly hampered by both physical and mental fatigue.
Behaviour	Changes to behaviour are often seen post-injury and present challenges for social integration. Addressing ABI survivors' behavioural changes is a particularly important area of rehabilitation as it is often these changes that survivors find distressing and that their families report having the most problems coping with <sup>[13]</sup> . Behavioural challenges have a marked impact on relationships and successful community participation and are an issue of concern many years post-injury. The literature points to the need for long-term support in this area <sup>[14].</sup>
Mental Health & Addictions Issues	Anxiety and depression rates are higher for individuals with ABI compared to the general population. Numerous studies on prevalence indicate that many survivors of brain injury had pre-existing psychiatric disorders and are at a substantially higher risk of developing mental health issues <sup>[15,16,17,18,19]</sup> and also of having pre-injury or developing post-injury substance use problems <sup>[18,20]</sup> . For those with pre-injury substance use problems, they are at much greater risk of developing post-injury substance abuse and experience much poorer overall outcomes as a result <sup>[21]</sup> .
Marital Discord	High rates of marital dissatisfaction and breakdown <sup>[22]</sup> are an unfortunate consequence after a partner sustains an ABI. The support that is lost due to marriage breakdown further impacts other aspects of survivors' lives.
Vocational Status/Return to Work	Most ABI survivors want to return to work post-injury but many are unable to resume their previous employment or work full-time for a variety of reasons. One study showed at one year post-injury, only 24% of TBI individuals were competitively employed <sup>[23]</sup> and another study showed for those working prior to their TBI, only 41% had resumed work up to two years post-injury <sup>[24]</sup> .
Independent Living & Homelessness	Without adequate family and professional supports to address the many and varied consequences of ABI, the ability for survivors to live independently is sometimes in jeopardy. Individuals with ABI are at increased risk of housing insecurity. The risk of homelessness is very real, with research showing an alarmingly high rate of ABI among

	the homeless population <sup>[25]</sup> . This potentially tragic outcome is what the ABI Partnership's programming and support ultimately work to mitigate.
Criminal Justice System Involvement	Studies have shown that lifetime prevalence of TBI is high among those in correctional facilities <sup>[26]</sup> with rates found to be as high as 60% of adult inmate populations in the U.S. <sup>[27]</sup> . Typical TBI symptoms (e.g., slow information processing, memory impairments, impulsivity) may be wrongly interpreted by correctional staff as defiance or resistance and lead to negative outcomes. Without the criminal justice system's full understanding of the consequences of brain injury, including the fact that it may be at the root of inmates' criminality, a sub-population of brain injury survivors (often times undiagnosed) who often concurrently experience mental health challenges, can end up in an unfortunate downward spiral of victimization and criminal justice system involvement.

No two brain injuries are alike. The challenges that survivors experience can often be helped or hindered by a variety of factors such as: age, gender, pre-injury educational and occupational attainment, income, and family and social support. It is important to understand that consequences resulting from moderate to severe brain injuries need to be managed, often for the remainder of survivors' lives. The scope of these challenges should not be underestimated. Better societal awareness needs to be created about them, as this awareness creates better understanding regarding the need for continued survivor access to individualized community-based supports such as those offered by the ABI Partnership.

## **The ABI Partnership Project**

The Acquired Brain Injury (ABI) Partnership Project (hereafter referred to as the "ABI Partnership") was established following the introduction to SGI's No Fault Insurance. It has been funded by SGI and managed by the Ministry of Health since its inception in January 1996.

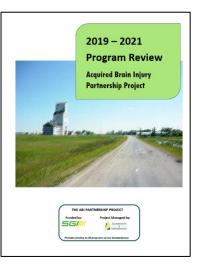
The unique partnership established by SGI and the Ministry of Health set out to build "a comprehensive, integrated system of supports, resources and services that will enhance the rehabilitation outcomes and improve the quality of life for individuals with acquired brain injuries and their families"<sup>[28]</sup>. The ABI 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,
  - $\succ$  social, and
  - 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<sup>[26]</sup>.

## **About the Current Report**

This report summarizes service events and activities that occurred in 2019-20 (the first year of this contract period), as well as 2020-21, where data was not affected with COVID- related service changes, including:

- Direct service to ABI survivors, families, and other service providers
- Education on how to prevent injuries and information provided about ABI and the ABI Partnership to a variety of audiences
- Injury Prevention events to a variety of audiences



#### **INFORMATION SOURCES FOR THIS REPORT**

	-				
Acquired Brain Injury Information System Production			Colendor wan Health Injury Inf		Report
Log Out E Client Administration Registration Service Events	Print Form			А	ction: [X]4 R
<ul> <li>Family Member</li> <li>Community Group</li> </ul>	Client ID HSN/ID (00	0000000 - 5	iask)		
Consultation	First Name				
	-	I.			

## The Acquired Brain Injury Information System (ABIIS).

This system tracks client demographics and referral sources, client referrals made, client and family services, consultations, education, and injury prevention activities.

**Annual Reporting.** This includes financial information, description of programming and partnership activities, and supplemental information (for this contract period, information on **COVID-19 service innovations**, quantity of service partnerships, and staffing).





**Client Outcome Reporting.** This includes: 1) Goal Attainment summary for each funded program, and 2) Mayo-Portland Adaptability Inventory for each consenting client.

## **Summary of the Programs Funded**

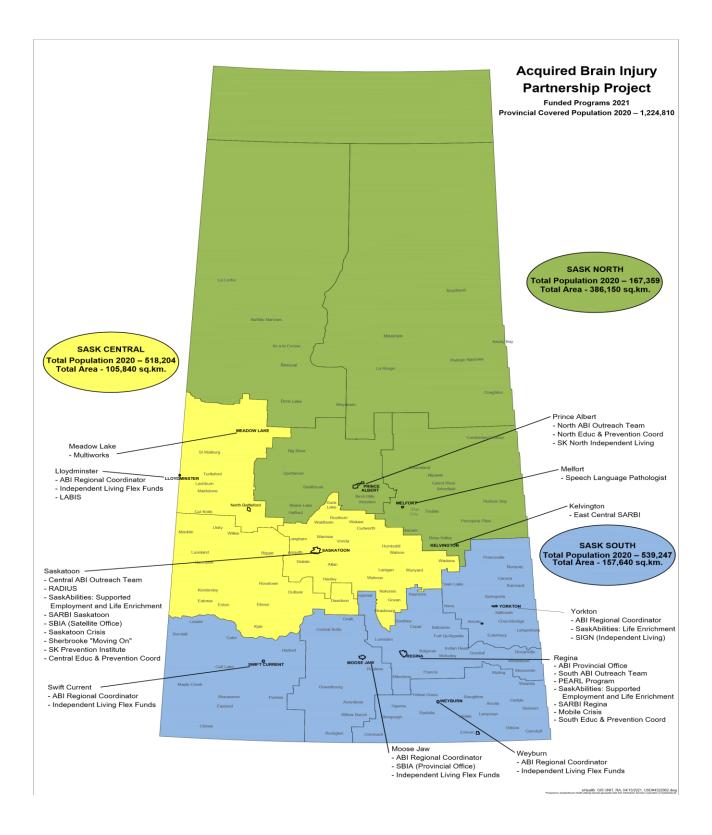
Funding is provided to 36 community-based programs (18 delivered by non-profit organizations, 17 delivered by the Saskatchewan Health Authority and 1 delivered by the Ministry of Health), including three multidisciplinary outreach teams responsible for three broad geographic service areas, and five education and prevention programs. A total of 66.7 direct service FTEs are funded by the ABI Partnership as reported at the end of the 2020-21 fiscal year, in addition to 1.0 FTE dedicated to provincial education and prevention activity coordination and 1.0 FTE dedicated provincially to project management.

Summary of the Programs Funded				
Funded Program Types	Description	Location of Program(s)*	Funded Positions	Percent of Total Funding
Case Management	Assessments, goal planning, service navigation including specialist and adaptive technology referrals, linkages to community services; based in distinct locations but province-wide service delivery	Regina, Saskatoon, PA, Lloydminster, Moose Jaw, Swift Current, Weyburn, Yorkton	31.8	50%
Education and Injury Prevention	Coordination of community-based injury education initiatives, including targeted children's programming as well as educational supports to survivors and families (e.g., retreats, toll free telephone number, presentations)	Regina, Saskatoon, PA	5	10%
Day Programming	Structured programming (e.g., leisure activities, life skill development, therapy) designed to enhance communication skills, improve interpersonal relationships, encourage community participation and provide family respite	Saskatoon, Regina, Kelvington, Lloydminster	8.2	7%
Independent Living and Residential	Services to help clients find appropriate housing & maintain independent living skills; includes rehab, recreation, a/vocational activities; transitional supportive apartments staffed 24/7; flex funds to contract as-needed individualized supports	PA, Regina, Yorkton	12.7	16%

	Summary of the Programs Funded				
Funded Program Types	Description	Location of Program(s)*	Funded Positions	Percent of Total Funding	
Life Enrichment	Recreational & leisure programming to facilitate personal/social rehab for clients unable to return to the work-force; focus on client interests that expose them to new experiences, reducing social isolation to increase community integration	Regina, Saskatoon, Yorkton	2.1	3%	
Children's Programming	Programming for children & youth to facilitate age-appropriate community integration opportunities; core goals include: • linking clients to services • supporting integration process • advocating for clients	Saskatoon	2	3%	
Vocational	<ul> <li>Support programs to aid clients in planning for, finding, and maintaining employment; services focus on: <ul> <li>reducing barriers to employment</li> <li>work readiness &amp; pre-employment support</li> <li>job development, matching, accommodation &amp; coaching</li> <li>regular client/employer touchbase</li> <li>ABI education in the workplace</li> </ul> </li> </ul>	Regina, Saskatoon, Meadow Lake	3.2	4%	
Crisis	Resources for hard to serve clients requiring more than mainstream services; prioritize aggressive outreach and stabilization to ensure safety, then provide supports to reduce crisis behaviour, meet/maintain basic needs, & improve functioning	Regina, Saskatoon	1.2	3%	
Rehabilitation	Individualized therapy services for those with speech, language, swallowing, and/or cognitive difficulties	Melfort	0.5	1%	
Provincial Coordination	Overall project management (advisory group, program monitoring and evaluation), also responsible for oversight of provincial ABI prevention/education activities, grants)	Ministry of Health, Regina	2	4%	
		Total	68.7	100%	

\*Note: While a program may be located in a particular city, their services are often provided to the surrounding communities or provincially

The map below shows the location of the funded programs by service area: south (blue), central (yellow), and north (green).



## Valuing the ABI Partnership

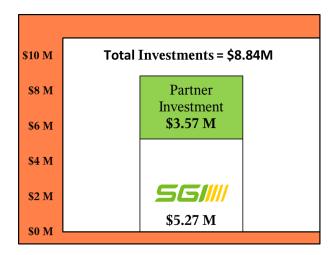
#### SGI TOTAL INVESTMENT

SGI has funded the ABI Partnership since January 1996, committing \$115M in total funding to date. In the current three-year contract period, which began April 1, 2019 and will end March 31, 2022, SGI has provided \$16.11M.

#### **PARTNER INVESTMENTS**

Over the 2019-20 and 2020-21 fiscal years, ABI funded agency partners reported an average annual investment of \$3.57M, augmenting SGI's annual funding of \$5.27M by 68% to support the delivery of ABI programming. Agencies supplement SGI's funding in many ways, including:

• enhancing program activities and hours of service through other funding sources (e.g., grants, fundraising)



- providing clinical supervision, administrative services, and information technology support
- accessing a substantial volunteer base as well as practicum students
- covering the cost of building occupancy, program and office supplies
- covering the cost of staff travel
- covering the cost of staff training and professional fees

Even during the pandemic, when fundraising activities and volunteer hours were reduced, these partner investments have been substantial. Together with SGI's core funding, they increase the scope and quality of ABI services to the benefit of ABI survivors, their families, and communities.

#### SGI PLUS PARTNER INVESTMENTS

The combined funding sources that support the ABI programming of ABI Partnership funded agencies therefore includes both Partnership funding and agencies' partner investments. This funding is reported by contract period in the table on the following page.

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	
<b>1999-2003</b> <sup>1</sup>	17.83M	3.5M	1.2M	34%
2004-2006	11.4M	3.8M	1.3M	34%
2007-2010	12.9M	4.0M	1.9M	47%
2010-2013	14.9M	4.9M	2.7M	55%
2013-2016	16.2M	5.2M	3.8M	73%
2016-2019	16.66M	5.3M	3.7M	70%
Current Contract 2019-2021	16.11M	5.27M	3.57M	68%

In-Kind Funding reported by ABI Partnership Funded Agencies over the last seven contract periods

The table above illustrates the significant increase in partner investments over time (which are due, in part, to the more thorough reporting). Although a decrease is seen in the current contract, this is due to reductions in fundraising revenue for several of our CBO funded agencies in the 2020-21 fiscal year due to COVID-19.

#### **RETURN ON INVESTMENT**

#### The only cure for Brain Injury is Prevention.

Since its inception, priority has always been given to the funding of education and prevention initiatives under the ABI Partnership service umbrella. We know the age-old adage, "an ounce of prevention is worth a pound of cure", and this is illustrated in the return on investment (ROI) for funding of injury prevention. Previous review of several injury prevention initiatives revealed an average ROI of 38:1<sup>2</sup>. In 2020-21, the ABI Partnership provided \$626K in annual funding to support injury prevention and education activities. Using the average ROI above and multiplying its effect

It would take having only **ONE** of the thousands of event attendees avoid a catastrophic injury or death involving a motor vehicle for SGI to recoup its entire investment in the ABI Partnership.

by \$626K in annual funding yields an ROI of \$23.8M for the province of Saskatchewan and SGI.

Every brain injury that is prevented results in significant, societal cost-savings. Because TBIs tend to occur with a younger population who are in their early years of productive activity, the

<sup>&</sup>lt;sup>1</sup> 1999-2003 was a five year contact. All other contract periods were three years.

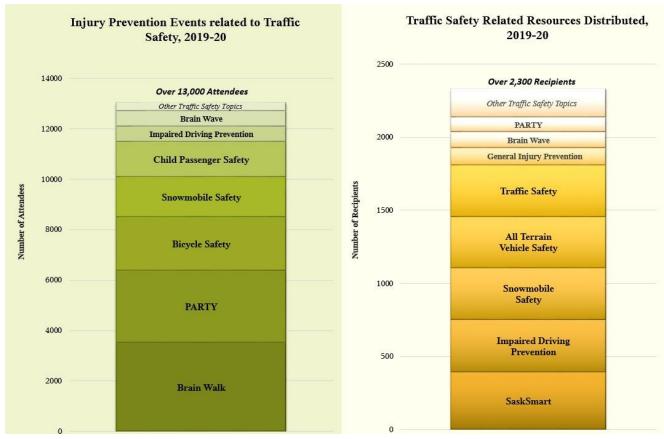
<sup>&</sup>lt;sup>2</sup> For detail see Appendix A - Cost Benefit Methodology.

economic burden of lost productivity is far greater due to the long-term disabilities and deaths that result. Preventable injuries cost the Canadian economy **\$29.4 billion in a single year,** including \$20.4 billion in direct health-care costs. The human cost of injury brings pain, suffering and diminished health and well-being to individuals and their families and impacts Canadians' potential to have long and full lives<sup>[29]</sup>.

As seen in the tables on the following page, much of the injury prevention programming delivered by ABI Partnership funded agencies touches on SGI priority areas (e.g., risky driving, bicycle safety, child passenger safety, pedestrian safety). Further, much of the general injury prevention programming also touches on road/vehicle safety issues; therefore much of this return on investment positively impacts SGI.

Through ABI Partnership-funded education efforts, thousands of people receive education to prevent injuries each year. It would take having only ONE of the thousands of event attendees avoid a catastrophic injury or death involving a motor vehicle for SGI to recoup its entire investment in the ABI Partnership.

Partnership programs delivered and/or coordinated education and prevention events in 18 topic areas to approximately 14,500 people in 2019-20. Traffic Safety is a programming priority, reflected in traffic safety-related events delivered to over 13,000 attendees in 2019-20, and traffic safety-related resources distributed to over 2,300 recipients.

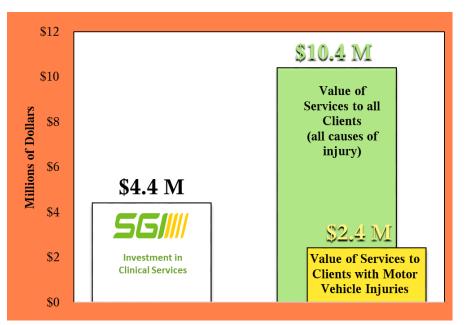


Source: Acquired Brain Injury Information System

#### **COST BENEFIT**

A cost benefit analysis<sup>3</sup> updated with 2019-20 client service data determined that it would cost SGI an average of \$2.4M annually to purchase clinical services for its MVC clients outside the ABI Partnership. However, it is impossible to place a complete monetary value on the full benefit of ABI Partnership funded services. SGI's funding has enabled the creation of a unique service infrastructure that did not exist prior and would no longer exist without it. It is the collective but intangible benefits from this infrastructure including: 865 collective years of staff SGI's funding has enabled a unique and mature ABI service infrastructure with: 865 collective years of ABI staff expertise, services available across the province and delivered through committed funded agencies that augment SGI's investment in ABI by 68% annually.

expertise in ABI, mature service networks, and unique services across the lifespan and available throughout the province that could not be purchased privately or would only be offered

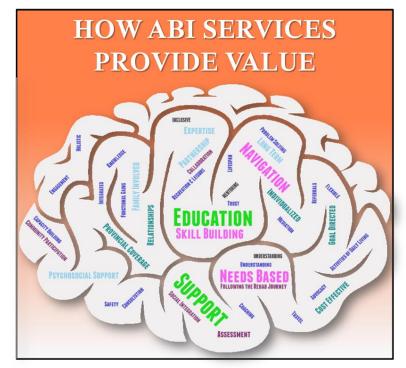


piecemeal, at best. ABI partner investments augment SGI's funding for ABI services by 68% annually. The whole is greater than the sum of its parts; together, SGI and ABI partner investments support comprehensive ABI services that effectively address the many and varied needs of ABI survivors, their families, and communities. SGI's funding of the ABI

Partnership provides a broad-based public good by enabling service access to all survivors of ABI regardless of their injury cause. The overall cost to the Province of Saskatchewan to provide these ABI services would be approximately \$10.4M annually - far exceeding SGI's \$4.4M annual investment in ABI clinical services.

<sup>&</sup>lt;sup>3</sup> For detail see Appendix A.

Last contract period, funded agency staff were asked to report on how their services provide value to ABI survivors, their families, communities, and to SGI. The word cloud to the right presents the themes they reported on, which remain relevant. Value was defined in terms of the principles that guide their work, the service needs they address, the types of service they provide, and the roles they play in supporting their clients.



The ABI infographic *Valuing Acquired Brain Injury Services* on the following page highlights some of the key service principles and areas of accomplishment that further support the value of ABI services.

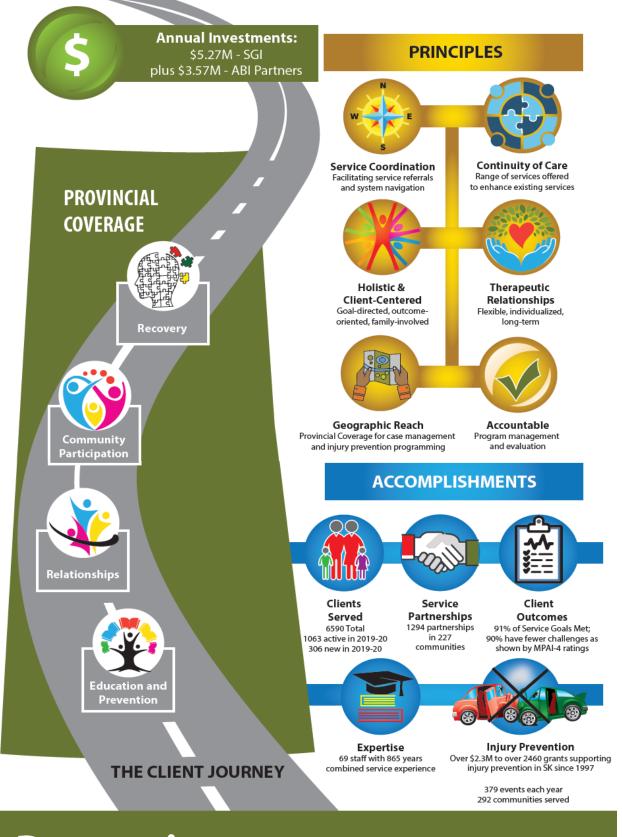
**Investments** – ABI partners invest \$3.57M to augment SGI's \$5.27M by 68%, for a total annual investment of \$8.84M.

Accomplishments – accomplishments highlighted include client service volumes, client success through service partnerships, positive client outcomes, service delivered by experienced staff, and substantial investment in injury prevention activity.

**Principles** – the Partnership provides unique, comprehensive & responsive services as shown through the key service delivery principles of: Service Coordination, Continuity of Care, Holistic & Client-Centered, Therapeutic Relationships, Geographic Reach, and Accountability.

**Client Journey** – foundational to the Partnership is primary and secondary *prevention* of brain injury, and *education* is the main vehicle for much of our activity. Strong *relationships* are key to success and start with the survivor and their ABI service team but extend out to include family, friends, and other service providers. The aim is to increase *community participation* in whatever ways possible with the ultimate goal of achieving *optimal recovery*.

## Valuing Acquired Brain Injury Services



**Prevention** ... the only cure for brain injury.

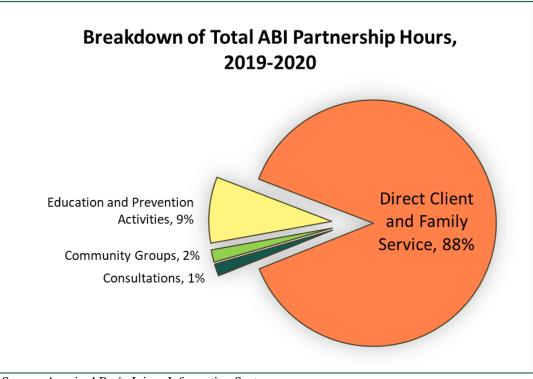
## **Provincial Overview – All Services**

#### **ABI PARTNERSHIP DELIVERED SERVICES**

The majority of service time in 2019-20 was direct client service with registered survivors; however, education and prevention activities, as well as community group<sup>4</sup> service hours were also a large proportion.

		% of Total
Type of Service	Service Hours	<b>Recorded Time</b>
Direct Client and Family Service	50,278	88%
Consultations	902	1%
Community Groups	928	2%
Education and Prevention Activities	4,947	9%
Total	57,055	57,055 hours

Source: Acquired Brain Injury Information System



Source: Acquired Brain Injury Information System

<sup>&</sup>lt;sup>4</sup> Community Group events include those services delivered to a group. These events are delivered to a wide variety of audiences – survivors, family, support groups, and health and other service providers.

## **Provincial Overview – Direct Client Service**

#### **REGISTERED CLIENTS**

In 2019-20, **1,063 clients** received service from an ABI Partnership funded program including 262 clients who were injured in a Motor vehicle collision (MVC). There were **306 newly registered** or reactivated clients, including 73 clients who were injured in an MVC. Over this contract period, MVCs were the leading cause of traumatic brain injuries, and the second leading cause of ABI, overall.

#### **SERVICE TIME BREAKDOWN BY CAUSE OF INJURY, 2019-20**



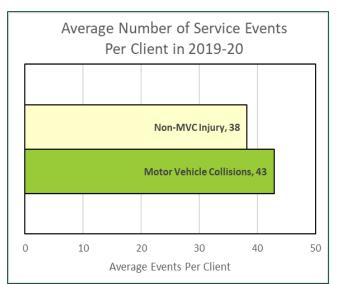
Source: Acquired Brain Injury Information System

Clients injured in MVCs received more service events and time from ABI Partnership funded programs than did clients injured in other ways.

MVC clients make up almost a quarter of all individuals served through direct service programs (1,604 of 6,590 individuals) since 2000. On average, these clients have required a greater service duration than clients with other injury causes (see table on the next page).

The five most common injury causes accounted for over two-thirds (68%) of **direct client service time**:

- 1. MVC 23%
- 2. Stroke 22%
- 3. Blow to Head 12%
- 4. Tumour 6%
- 5. Fall 4%



Source: Acquired Brain Injury Information System

Average Number of Years Receiving ABI Partnership Services by Cause of Injury and Status, as of March 31, 2021

Injury Cause	Inactive Clients	Active Clients	All Clients
Motor Vehicle/Motorcycle	3.5	8.4	4.0
All Other Injury Causes	2.2	5.7	2.5
Total Individuals	2.5	6.5	2.9

Source: Acquired Brain Injury Information System

Note: Length of service is days between earlier service event date and most recent service event date. Breaks in service are not accounted for.

In addition to requiring service for a greater length of time, clients injured in motor vehicle collisions typically require more service hours than clients injured by other causes. Over the course of their service involvement, MVC clients received an average of 173 hours of service versus 132 hours for clients injured in other ways.

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

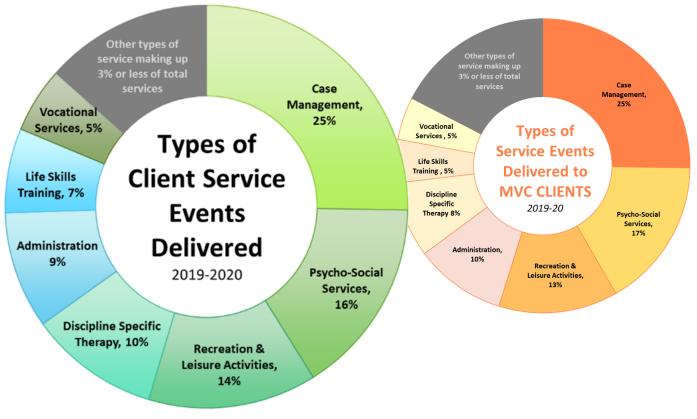
#### **REGISTERED CLIENTS – BREAKDOWN OF TYPES OF SERVICES RECEIVED**

The ABI Partnership funds a wide variety of programming not provided by the publically-funded health system. Over half of the ABI Partnership's clients in 2019-20 were registered with one of the ABI Outreach Teams (59%), and over half (51%) were registered with one or more funded programs.<sup>5</sup>

Case management is an integral programming component, receiving 50% of Partnership funding. Case management services help clients navigate a complex service system to address their individual needs. These services are available throughout the entire province and can be accessed through three broad geographic service areas.

In 2019-20, case management comprised 25% of the services received by ABI survivors. The other 75% of services reflected a range of programming. This was true for clients of all injury causes, including MVC clients.

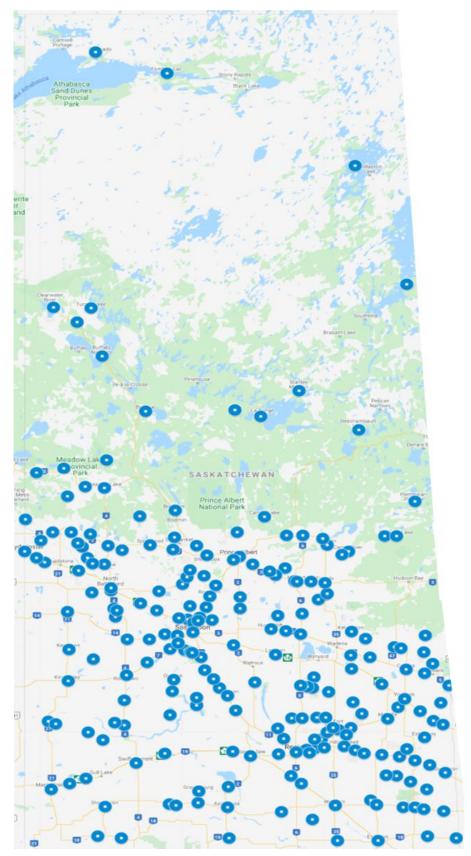
<sup>&</sup>lt;sup>5</sup> These percentages add to more than 100% as many clients (11% of registered clients) were registered with both an ABI Outreach Team and one or more funded programs.



Source: Acquired Brain Injury Information System

### GEOGRAPHIC REACH OF CLIENT SERVICES

In 2019-20, clients received a range of programming in 227 communities across the province, as illustrated in the map on the right.



Source: Acquired Brain Injury Information System



#### SERVICE COORDINATION AND PARTNERING

The majority of funded program<sup>6</sup> service events occur with either the individual survivor (53%) or a group of survivors (19%). Case management programs,

however, have service events with a wide variety of recipients, as shown in the table below. The reason is that case management programs coordinate services and help clients and families navigate a variety of programming, which requires not only working with the clients, but also their supporters (such as family, schools, employers) as well as services to aid in survivors' optimal recovery.

Service Recipient, 2019-20	Percentage of Total Events
Individual (Survivor)	36%
Other Service Provider	17%
Partnership Service Provider	15%
Family/Natural Supports	10%
Group (of survivors)	7%
Survivor & Family	6%
Survivor & Other Service Provider	4%
Other Group (mixed)	3%
School or Employer	1%

Source: Acquired Brain Injury Information System

#### WHO FUNDED AGENCIES COMMUNICATE WITH – CONSULTATIONS

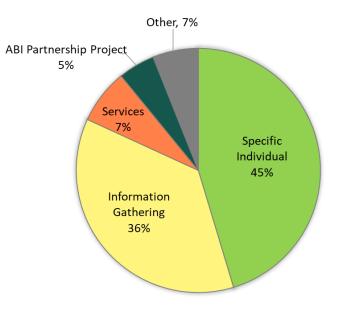
Service is coded as a "consultation" when funded agencies give information and advice to ABI survivors, their families, other funded programs, and/or health and other professionals of a more time-limited (ad hoc/one-off) nature. These service exchanges are not associated with registered clients<sup>6</sup>.

Consultations take place with a wide variety of people and programs. In 2019-20, 79% of consultations were with one of five recipients as shown in the table on the next page. The pie chart shows that the majority of exchanges were for the purpose of a specific individual, information gathering, or to ask about services.

<sup>&</sup>lt;sup>6</sup> Services with registered clients are recorded as direct client service.

Tł	ne Top Five Consultation Recipients, 2019-20	% of Total Consultations		
1	Acute Care Services	25%		
2	ABI Survivors & Families	21%		
3	ABI Partnership Program	13%		
4	Other Health Care Professionals	11%		
5	Rehabilitation Services	9%		
Т	Top five consultation recipients account for 1,186 of 1,504 consultations			

#### **CONSULTATION PURPOSE, 2019-20**



Source: Acquired Brain Injury Information System

The majority of consultations (67%) take place either in person or over the phone.<sup>7</sup> The exception was the Saskatchewan Brain Injury Association's (SBIA) consultations, where the majority took place via email and phone (56% by email, 42% by phone).

This breakdown of consultation events shows how ABI Partnership funded agencies:

- are a valuable source of information to survivors not registered in their program, as well as their families
- partner well with the medical system (acute care, rehabilitation services, other health care professionals), and
- work well as a team in that 13% of all consultations recorded during this contract period were with other ABI Partnership programs.

#### Helping Others Navigate

In the 2019-20 fiscal year, ABI Partnership staff consulted with clients and families, service providers, and a variety of other people a total of 1,504 times.

This means that ABI Partnership staff are helping others to navigate the system and to connect to services an average of six times every workday.\*

\* based on 253 workdays per year

<sup>&</sup>lt;sup>7</sup> For case management programs, consultations occurred by phone 44% of time, and in-person 23% of the time. For other funded programs, most consultations were in-person (72%).

#### CLIENT REFERRALS

Funded agencies referred their clients to over twenty-five different kinds of programming in 2019-20. Most referrals (95%) were made by a case management program. Referrals were made to services such as other partnership programs (i.e., outreach teams, rehabilitation services, mental health services, and many other health and human services).

#### **R**EFERRALS RESULTING FROM CONSULTATIONS<sup>8</sup>

Over a third of consultations (36%) resulted in a referral. This demonstrates how the ABI Partnership assists with service navigation. Of the referrals made during consultation events:

- 69% were to ABI Partnership programs
- 17% were to rehabilitation and other health services
- 14% were to a wide variety of other services

#### **REPORTING ON PARTNERSHIPS**

Partnerships are a foundational principle of service delivery and an integral part of the ABI Partnership's service delivery success. The ABI Partnership was established to augment, not replace, other health and human services. ABI funded agencies work together as well as in their

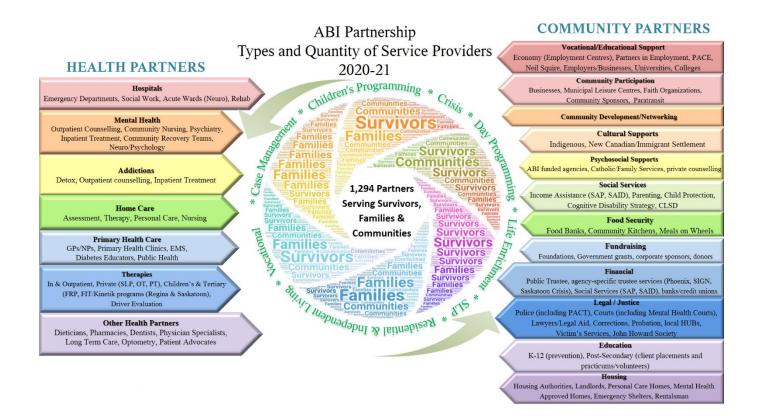
local communities to meet client needs and to improve longterm program and client outcomes.

Service partnerships address immediate client goals, provide education and training support, 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. ABI funded agencies work together as well as in their local communities to meet client needs and to improve long-term program and client outcomes. They reported work with **1,294 partners in 2020-21.** 

To profile the important roles fulfilled by service partners, funded agencies report annually about them. In 2020-21, they reported work with 1,294 partners.

The types of partners reported by funded agencies are summarized in the graphic on the following page:

<sup>&</sup>lt;sup>8</sup> Consultations are events that occur when the service need is of a more time-limited nature. These exchanges are not associated with registered clients.



### ADAPTING TO THE COVID-19 PANDEMIC - SERVICE INNOVATIONS IN 2020-21

On March 11, 2020, the World Health Organization (WHO) declared the novel coronavirus (now known as COVID-19) a global pandemic. Effective March 17, 2020, Saskatchewan began issuing a series of public health restrictions to mitigate its spread.

Community-based programming for ABI was affected by these restrictions in a number of ways. In order to maintain service, a number of program modifications were necessary based on the changing environment and client needs.

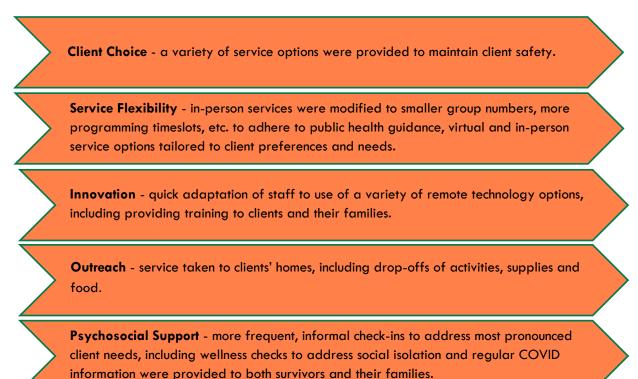
Service adaptations included:

- a pause on in-person programming in the early months and again in late fall 2020 when community transmission was more widespread
- staff adapting to remote work environments, including training clients and their families to use remote technologies
- agencies implementing a number of public health measures (physical distancing, barriers, masking, equipment sanitization, hand sanitization, etc.) in order to maintain the safety of

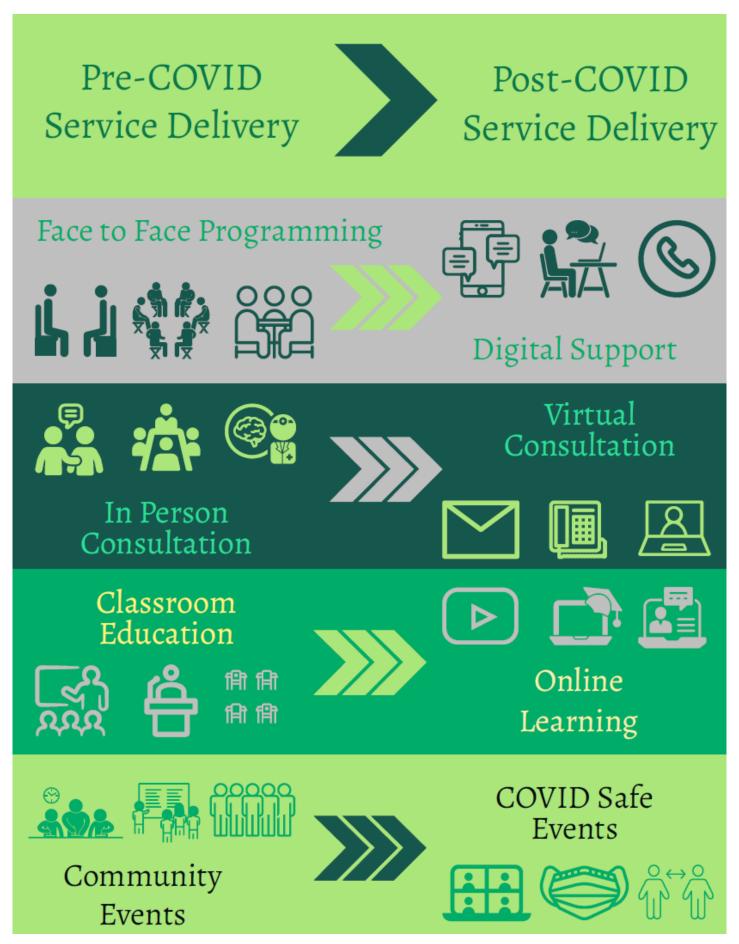
staff and program participants, in both resuming in-person programming and in addressing client needs remotely, when warranted.

Because the ABI clientele is deemed vulnerable, extra precautions continued throughout 2020-21 to maintain their health and safety, including converting to virtual from in-person service in areas where COVID transmission was high.

Service providers had to pivot in a variety of ways to ensure clients' needs continued to be met. ABI funded agencies reported regularly throughout 2020-21 on their COVID service delivery response. Some themes that emerged from their reporting are as follows:



The Pre-COVID/Post-COVID Service Delivery infographic on the following page illustrates the main ways ABI funded agencies pivoted to provide COVID-Safe service in 2020-21. A COVID Service Innovation infographic table further highlights some of the particular virtual, modified in-person and program development innovations taken by individual programs. It is presented along with specific Program Type information in the following section of the report.



ABI Partnership Project: 2019-21 Program Review

Page 31 of 96

	Virtual Modifications			Modified In-Person			Program Development		
Program Area	Phone/Video Chat	Online Education/Activities	Email/ Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement	
				<u>AI</u>				Č	
Case Management Programming									
<b>Central Outreach</b>	✓	√		✓	1	✓		√	
South Outreach	✓	√	✓	√		√	✓	✓	
North Outreach	√		√	√	✓	√	✓	✓	
Lloydminster	✓	√				✓			
Moose Jaw	✓			√		√			
Swift Current	✓			√		✓			
Weyburn	✓	√	✓			✓			
Yorkton	✓			✓		✓			
Day Programming									
SARBI Saskatoon	✓		√		✓	✓	✓		
SARBI Regina	✓		✓		√	√	✓		
Sherbrooke	✓	√			✓	√	✓	√	
EC SARBI	✓	√				√			
LABIS	✓					√			
Independent Living and Residential									
PEARL Program		√		√	√	√	√		
SK North	✓	✓	✓	√		√			
SIGN	✓		√	√		√		√	
Life Enrichment									
SaskAbilities Regina	4	✓	4			4	✓	✓	
SaskAbilities Saskatoon	1	✓	1		1	1	1		
SaskAbilities Yorkton	1	4			~	~	1		
Children's Programming									
Radius	√	✓	√			√	√	✓	
Vocational Programming									
SaskAbilities Regina SE	1	✓ <b>√</b>	√			~	✓	~	
SaskAbilities Saskatoon SE	4	~	1			✓	√	✓	
Multiworks	✓	✓			✓	√	✓		
	Crisis Programming								
Mobile Crisis	✓		1515 I Tograi	inning ✓		✓			
Saskatoon Crisis	✓		√	· ·		√			
	Rehabilitation								
Melfort SLP	✓	✓	√ Nenabilitat		✓	✓	√		
Mellort SLP	v	Y	v		¥	•	¥		



#### **CLIENT OUTCOMES**

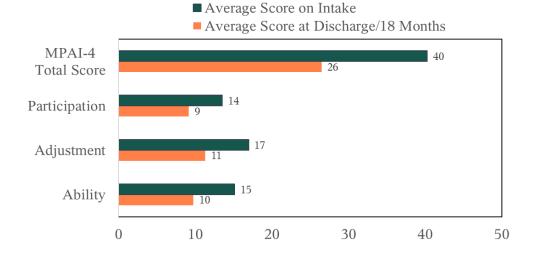
#### FUNCTIONAL IMPROVEMENT

The Mayo Portland Adaptability Inventory (MPAI-4) is used by programs around the world to measure client progress and program outcomes. The MPAI-4 provides an indication of challenges or impairments in three clinical areas of functioning:

- *ability* (i.e., sensory, motor, and cognitive abilities),
- *adjustment* (i.e., mood, interpersonal interactions), and
- *participation* (i.e., social contacts, initiation, money management).

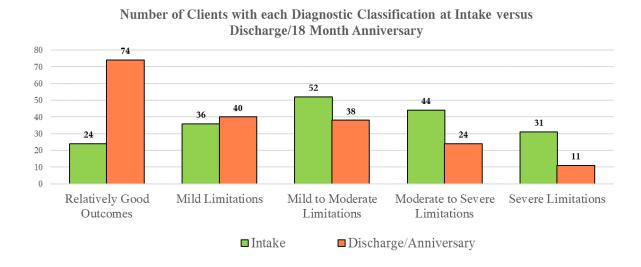
The MPAI-4 is used by every ABI Partnership Project funded program working with registered clients. Inventories are filled out after a client's intake to a program, and either at their 18-month anniversary or discharge from the program.

Since programs began using the MPAI-4 in 2007, results have been received for 977 clients. This contract period, intake and anniversary/discharge MPAI-4 results were received for 187 clients. The total scores and sub-scores for survivor rated, staff rated, and significant other rated inventories all showed statistically significant improvement between their intake and the anniversary or discharge administration (lower scores mean less challenges and/or impairments).<sup>9</sup>



<sup>&</sup>lt;sup>9</sup> See Appendix B for MPAI-4 data tables

The MPAI-4 results collected this contract period show that after involvement with the ABI Partnership Project, **the vast majority (90%) of clients experienced fewer challenges and impairments**. In fact, three out of every five clients experienced such meaningful improvement that they received a less severe MPAI-4 diagnostic classification.



#### **GOAL ATTAINMENT**

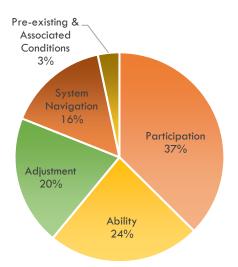
Staff in ABI Partnership programs set goals in collaboration with clients. These goals reflect client service needs that assist in their re-integration back into community.

Goal Attainment data is one of two provincial outcome tools used by ABI Partnership funded programs since 2004.

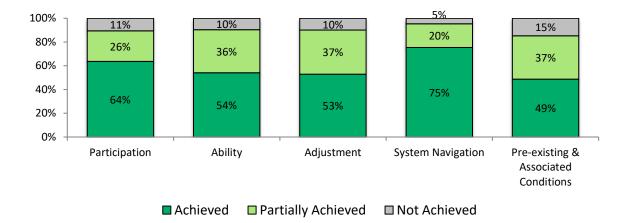
On average, 355 clients are discharged each year with each client having worked on an average of 7 goals with ABI Partnership staff's assistance and/or guidance. This contract period, 91% of the goals reported by discharged clients were reported as partially to fully achieved.

The ABI Partnership groups goals into five categories, four of which correspond to Mayo-Portland Adaptability Inventory (4th Edition) subscales.<sup>10</sup> Over a third of goals for discharged clients this contract period were participation goals. The following gives a breakdown for clients discharged in 2019-20 and 2020-21.

<sup>&</sup>lt;sup>10</sup> This excludes System Navigation goals which are tracked in the goal attainment reporting, but are not part of the MPAI-4 items.



Most participation goals, almost two thirds, were fully achieved. Funded agencies were also very successful at assisting clients to navigate complex systems, one of the original goals of the ABI Partnership<sup>[26].</sup> Three quarters of system navigation goals were fully achieved, and another 20% were partially achieved.



Of the five goal categories, clients had the most difficulty with "Pre-existing and Associated Conditions" where 15% of goals were not achieved. Half of "Pre-existing and Associated Conditions" goals were recorded as "addictions" goals, and while clients **fully** achieved half of their addictions goals (50%), 15% of goals were not achieved, higher than the overall average of 9%. This speaks to the difficulty that clients face in this area.

Over a quarter (26%) of recorded goals were in the following five areas, all with high levels of achievement (83%-95% partially to fully achieved).



Highlights from 2019-20 and 2020-21 Goal Reporting:

- Achieved goals (both full and partial achievement) were most frequently recorded in the following categories: "Physical" (242 achieved goals, 95% achievement in the goal category overall), "Leisure Activities" (180 goals, 89% achievement overall), "Transportation" (164 goals, 90% achievement overall), "Housing" (157 goals, 94% achievement overall), and "Memory" (149 goals, 94% achievement overall). These achieved goals made up 22% of all client goals this contract period.
- Non-achieved goals were most frequently recorded in the following categories: "Employment" (24 non-achieved goals, 83% achievement in the goal category overall), "Attention/Concentration" (23 goals, 81% achievement overall), "Leisure Activities" (23 goals, 89% achievement overall), "Transportation" (19 goals, 90% achievement overall), and "Behaviour Management" (17 goals, 79% achievement overall).
- The areas with the highest percentage of goals going unachieved (though some areas had very few goals overall) were:

Goal Area	% of Goals Not Achieved			
Behaviour Management	21%			
Time-Awareness/Management	19%			
Attention/Concentration	19%			
Self-Awareness/Insight	18%			
Initiation	17%			
Employment	17%			

• These levels of non-achievement speak to the long-term nature and difficulty working in these areas.

#### GOALS FOR ACTIVE CLIENTS IN 2020-21

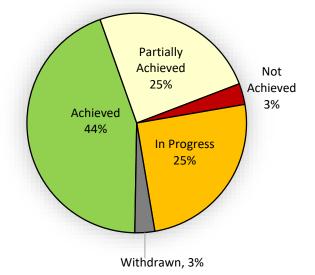
The reporting for active clients shows goal achievement for clients still engaged in programming, rather than at the conclusion of their involvement. Unlike the summaries for discharged clients,

the goal attainment summaries for active

clients include "in progress" as an achievement level. There were 3,387 goals recorded for 729 active clients in 2020-21, averaging nine goals per client. The majority of recorded goals were partially to fully achieved, with a quarter of goals still in progress.

The five most frequently recorded "in progress" goals (accounting for a third of all in-progress goals) were:

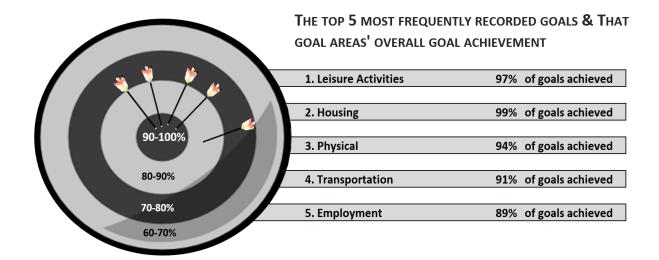
- Employment
- Leisure Activities
- Physical
- Transportation
- Memory



The large number of these goals may suggest these areas require longer-term work to achieve.

The most frequently recorded "not achieved" goal area for active clients in 2020-21 (accounting for one quarter of non-achieved goals) was **Community Involvement/Groups**. This is likely due to the impact of COVID on community involvement and leisure opportunities.

The five most common goals areas for clients discharged this contract period were also the most common for clients active in 2020-21. One third (34%) of recorded goals were in the following five areas, all with high levels of achievement (89%-99% partially to fully achieved).



ABI Partnership staff work with ABI survivors on a wide range of goals to help them achieve the highest level of functional independence and community participation possible. Key aspects of service that impact client goals are a positive rapport/therapeutic alliance between ABI staff and survivor, assistance with service navigation to address varied service needs to meet these goals, and recognizing the importance of family support in achieving good outcomes.

#### SERVICES FOR FAMILIES OF ABI SURVIVORS

Brain injury significantly impacts the entire family. Based on families' unique needs and often long-term caregiving role<sup>[30]</sup>, they were included in the ABI Partnership's original mandate and continue to be supported.

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<sup>[4,31,32]</sup> – all areas that ABI funded agencies address on a regular basis. As it is most often family members that take on caregiving roles to ABI survivors post-injury<sup>[32],</sup> it is both necessary and beneficial to equip them with information about what

Based on families' unique needs and often long-term caregiving role, they were included in the ABI Partnership's original mandate and continue to be supported.

to expect and how to deal with the varied sequelae that manifests with brain injury. Families often require information about what services and supports are available, then help with navigating the service system and in accessing these services<sup>[33].</sup>

Family members face one of their most difficult tasks in coping with the aftermath of brain injury<sup>[30],</sup> and service responses are tailored, where possible, to keep this impact on families in mind.

Funded agencies report working with families in the following ways:

- Psychosocial support and education are provided to help families understand and deal with survivors' changes in behaviour, to cope with their own stress and depression, and to adapt to their role and relationship changes.
- System navigation assistance and referrals are provided to address their and their loved one's needs (medical, financial, education, employment).
- The Saskatchewan Brain Injury Association is funded to deliver three separate annual events to provide education and support to both families and survivors.
- Families are often funded agencies' first point of contact and are involved with them in intake interviews and information-gathering.
- 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.
- Individualized services are provided to families, on a case-by-case basis.
- When survivors do not want/require service from the Partnership, but their family/caregivers do, the family (spouse, parent) is sometimes the primary client. Family may also be seen independently of survivors to gain additional insight and information about family dynamics and needs.
- 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.
- 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 like 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 also offered periodically to address specific needs of a group of family members.

In 2019-20, some family service event highlights include:

• There were 3,457 services delivered to family and natural supports of survivors:

Service Events delivered to Family & Natural Supports	Number of Events	% of total Events Delivered to Family
Family of Registered Survivors	2,898	84%
Family of Unregistered Survivors	66	2%
Consultations	116	3%
Community Group	377	11%
Total Events	3,457	

Source: Acquired Brain Injury Information System

- Family/Natural Supports of **registered survivors** were the sole recipients of 1,843 events, and 1,055 as joint recipients with the survivor. Half of these events were case management (50%), followed by family case management (14%), and Support Groups (12%).
- 18% of case management programs' service time was spent communicating with family or natural supports.
- Family and natural supports of **unregistered** ABI survivors primarily received Family Education and Training (38%), Case Management (20% of events), Family Consultation (17% of events), and Family Psycho-Social Services (17% of events).
- 377 **community group events** were offered to family and natural supports alone or with their family members. Most of these events (81%) were support groups and other support events (e.g., Lunch and Learns, annual events like Christmas Parties).

## **Program Type Summaries - Direct Client Service**

A summary of each program type funded by the Partnership is outlined in the following pages including the amount of Partnership funding this contract period, partner investment, a summary of the services delivered, most frequently reported service events in the ABI Information System (ABIIS), and COVID-19 service delivery innovations.

## **Provincial Coordination**

Funded Programs	Average Annual Funding
<ul> <li>ABI Provincial Office:</li> <li>1. Ministry of Health, Regina, Provincial</li></ul>	SGI Funding: \$219K
Coordinator <li>2. Provincial Education and Prevention</li>	% of Total Partnership Budget: 4%
Coordinator	Partner Investment: \$202K

#### Service Description

The ABI Provincial Office provides overall project management and coordination of the ABI Partnership. Responsibilities include contract management of tripartite agreements (program monitoring, reporting on service utilization trends, issues management, policy development, and ensuring reporting compliance of funded agencies), organization and/or sponsorship of professional development opportunities to funded agencies, as well as support for the Acquired Brain Injury Information System and the ABI Partnership website.

To ensure that the ABI Partnership service continuum remains responsive to client needs, the ABI Provincial Office formally reports on ABI Partnership activities to the project funder, SGI, as well as to the ABI Provincial Advisory Group three times annually. The ABI Provincial Advisory Group provides consultation and advice.

Detail on the activities of the Provincial Education and Prevention Coordinator is provided in the Education and Prevention section on page 67.

## **Case Management**

#### Funded Programs

- 1. Sask North ABI Outreach Team (Prince Albert)
- 2. Sask Central ABI Outreach Team (Saskatoon)
- 3. Sask South ABI Outreach Team (Regina)
- 4. Cypress ABI Coordinator (Swift Current)
- 5. Five Hills ABI Coordinator (Moose Jaw)
- 6. Prairie North ABI Coordinator (Lloydminster)
- 7. Sun Country ABI Coordinator (Weyburn)
- 8. Sunrise ABI Coordinator (Yorkton)

#### Average Annual Funding

SGI Funding: \$2.6M % of Total Partnership Budget: 50% Partner Investment: \$1.1M

## Service Description

Three ABI Outreach Teams, located in Prince Albert, Saskatoon and Regina are responsible for three broad, geographic service areas, encompassing all former health regions (see service map, page 10), and for enabling case management service access throughout the entire province. In addition, five ABI Coordinators deliver targeted and localized case management support.

The Outreach Teams and ABI Coordinators work to bridge the gap in service between acute care/rehabilitation and the community.

ABI case management programs' mission is to provide individual and family support to people with ABI so that they may live successfully in their communities with improved quality of life.

Case management programs provide the following services:

- Client Case Management/Service Coordination which includes assessment/reassessment (including some discipline-specific assessment), care planning, service coordination, and as-needed crisis support.
- Linkages to community resources helping clients and families navigate and connect to various service supports (e.g., medical, financial, education, housing, recreation/leisure, social) they need to facilitate optimal levels of functioning.
- **Direct Service** is also delivered including:
  - Discipline-specific assessment and treatment provided when otherwise unavailable (e.g., discipline-specific assessment and individual and group treatment).
  - Education to survivors and families includes specifics on individual survivors' brain injuries (e.g., area damaged, expected short- and long-term impact) as well as

general brain injury and management information (e.g., fatigue, impact of alcohol on brain function, how to prevent subsequent injuries).

- Education for other service providers the same education as noted for clients and families above is also provided to community partners who are working with ABI clients. Education is also given about how to best tailor their services to meet the needs of individual clients.
- Client Goal-Directed Service all service provision is driven by clients' goals and based on Specific-Measurable-Achievable-Realistic-Timely (SMART) aimed at achieving as much functional independence at home and in community for them as possible. Some typical examples of goals worked on are: return to productive activity (school and work), independent living (home and money management) support, social relationships, communication, and community participation.
- Education and Injury Prevention Services the ABI Regional Coordinators also engage in injury prevention activities and provide education to target groups in their local service areas. They 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 awareness events around topics such as the *Prevent Alcohol and Risk-related Trauma in Youth* (PARTY) program as well as bike, medical scooter, ATV, and farm safety.

## Annual Program Utilization in 2019-20

**Registered Clients:** 824 clients (77% of the Partnership's total registrations) **Direct Client Service Events:** Accounts for 37% of all Partnership service events

Top 5 Service Events	Proportion of Case Management Service Time	Case Management Sub-codes	Proportion of Case Management Time
Case Management			
Recreation & Leisure Activities	17%	Review/Reassessment Process	43%
Support Group	9%	Health Service Coordination	15%
Administration	9%	Intake Process	12%
Discipline Specific Therapy	9%	Coordination of Other Services	10%
1 1 10	770	Financial Service Coordination	9%
% of Case Management Total Service Time	83%		

Registered Clients - Top 5 Referral Sources for Clients Seen by Case Management Programs in 2019-20				
Place or Agency that Referred Client to the Case Management ProgramProportion of Clients				
Rehabilitation Services	28%			
Other Health Care Professionals	17%			
Acute Care Services	17%			
ABI Outreach Team	11%			
Client Self-referrals	6%			
Total	79%			

#### COVID Service Innovations

	Vir	tual Modificati	ions	Мо	dified In-Per	son	Program	n Development
_	Phone/Video Chat	Online Education/ Activities	Email/ Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement
Program Area								
<b>Central Outreach</b>	1	1		✓	4	✓		✓
South Outreach	1	1	✓	√		✓	√	✓
North Outreach	1		1	1	1	1	✓	√
Lloydminster	1	1				1		
Moose Jaw	1			√		✓		
Swift Current	1			√		1		
Weyburn	1	1	1	1		✓	1	
Yorkton	√			1		✓		

**Virtual Service Delivery:** the majority of case management service was offered virtually during 2020-21, primarily by phone (including three-way calling for case conferencing), but also via various video platforms (when available to the client). Assessments, therapy consults, and case reviews were offered through the SHA's secure videoconferencing platform, Pexip. Client check-ins and support groups were delivered through FaceTime and Zoom. Both survivor and caregiver support groups were also offered virtually. Caregiver support groups, in particular, were much appreciated for the peer support and stress reduction they provided during lockdown. **In-person service:** was offered to meet urgent needs such as food security and medication management. Outdoor or 'in community' visits were also offered to address psychosocial needs.

**<u>Resource Development</u>**: plain language COVID information and community resource listings were sent to clients to assist them in understanding public health measures and in navigating the available services during lockdown. The South team also spent time developing an ABI Wellness Education Series for future small-group implementation.

**<u>Quality Improvement</u>**: the three Outreach teams collaborated on quality improvement activities (e.g., standardizing several of their client reporting tools).

## ABIIS Service Time Breakdown in 2020-21:

While travel time decreased 74% (266 hours from 1,013 in 2019-20), case management programs maintained the same geographic reach (166 and 165 communities served in 2019-20 and 2020-21 respectively).

2019-20	2020-21
18%	52%
7%	23%
12%	4%
46%	16%
17%	6%
	18% 7% 12% 46%

Source: Acquired Brain Injury Information System

As shown in their service data (see table on the right), this was largely accomplished by leveraging virtual communication to reach out to clients and families.

While time spent on in-person events decreased in 2020-21 (e.g. Recreation and Leisure only made up 3% of total service time versus 17% the previous year), additional time was spent on maintaining contact with clients through case management events, which increased substantially in 2020-21 (57% of total service time versus 39% in the previous year).

#### Valuing the Unique Service Role and Impact of ABI Case Management Programs:

Three important themes stand out in describing ABI case management programs' unique service role and its impact:

- Service linkages providing transitional support from acute care to community is an important aspect of service that assists with clients' continuity of care.
- Geographic reach an important feature of ABI case management is that the Outreach Teams are responsible to serve three broad geographic areas providing service coverage

"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 ~

for the entire province. ABI Coordinators provide additional support at the local community level.

• Flexible service – service is not 'one size fits all', but tailored to address individual need.

ABI case managers will work with clients 'where they are at' whether it be at home, at school, at work, or in the community. In addition to the supportive role they play, they help clients and their families navigate services and partner with other existing services to meet survivors' varied needs.

...a resource like no other in our health system and...clients are fortunate to have an open door in that program that they can turn to.

 $\sim$  Community Partner  $\sim$ 

Several sources in the ABI literature have documented the importance of access to skilled, long-term case management, service coordination, and system navigation. Through these types of supports, many critical needs are met for both survivors and their families<sup>[3,4,9]</sup>. Recent research into system navigation supports for ABI individuals

has spoken of the successful outcomes achieved by clients having access to this service<sup>19],</sup> which validates the Partnership's significant investment in this type of service support.

## **Day Programming**

#### Funded Programs

- 1. SARBI Saskatoon
- 2. SARBI Regina
- 3. East Central SARBI (Kelvington)
- 4. LABIS (Lloydminster)
- 5. Sherbrooke Community Center "Moving On" (Saskatoon)

Average Annual Funding SGI Funding: \$373K % of Total Partnership Budget: 7% Partner Investment: \$526K

## Service Description

ABI survivors often need help with social communication skills and behavioral support. They are often socially isolated and need access to programming that will motivate them to leave home. All ABI Partnership-funded day programs provide a safe, welcoming, inclusive, and structured environment where ABI survivors can work together on leisure and other activities to reach their goals. Each program is structured slightly differently. In addition to offering physical and leisure activities and working on psychosocial skills, Sherbrooke's "Moving On" program also focuses on life skills such as money management and meal preparation, and East Central SARBI carries out therapy plans (speech language, physical therapy) to improve speech and functional mobility.

The goal of all day programs is to increase skills in the areas of communication, interpersonal relations, and community participation to enhance the survivor's quality of life.

Another critical feature of day programming is the family respite it provides, helping to reduce caregiver burden and stress. Family members who might live with or care for a loved one with a brain injury can enjoy a break for several hours a day, several times a week knowing that their loved one is being taken care of, learning skills, and enjoying themselves with other survivors.

"After (my son) was in a motor vehicle accident, he hated the world, had limited social skills and had no idea how to function in society with his limited capabilities. (The ABI day program) provided him with a place to interact with others and learn valuable life skills while being supervised and guided by a great team."

 $\sim$  Family Member  $\sim$ 

## Annual Program Utilization in 2019-20

**Registered Clients:** 85 clients (8% of the Partnership's total registrations) **Direct Client Service Events:** Accounts for 15% of all Partnership service events

Top 5 Service Events	Percent of Day Program Service Time
Psycho-Social Services	52%
Discipline Specific Therapy	30%
Recreation & Leisure Activities	8%
Case Management	7%
Life Skills Training	2%
% of Day Programs Total Service Time	98%

Registered Clients - Top 5 Referral Sources for Clients Seen by Day Programs in 2019-20				
Referral Source	<b>Proportion of Clients</b>			
ABI Outreach Team	40%			
Family	18%			
Long Term Care/Special Care Homes	7%			
Other Health Care Professionals	7%			
Other Health Services	7%			
Total	79%			

## **COVID Service Innovations**

	Vir	tual Modificati	ions	Мо	dified In-Per	son	Program	Development
D. A	Phone/Video Chat	Online Education/ Activities	Email/ Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement
Program Area								
SARBI Saskatoon	4		1		4	4	4	
SARBI Regina	1		1		1	✓	✓	
Sherbrooke	√	√			1	✓	√	✓
EC SARBI	√	√				√		
LABIS	4					✓		

Day Programs were impacted in their ability to deliver in-person, group programming in the usual way for many months during 2020-21, and responded with a variety of service innovations.

Phone/wellness checks were common across all programs. Some unique innovations undertaken include:

**SARBI Saskatoon/Regina** created and distributed a weekly newsletter of puzzles, photos, quizzes and COVID information to stay connected with their clients; they also provided staff-delivered doorstep drop-offs to their clients with activities and treats to mark special times throughout the year.

**East Central SARBI** in Kelvington had a plexiglass divider installed to continue in-person speech/language sessions and purchased equipment to enable virtual therapy sessions. They modified service through scheduled appointments.

**LABIS** offered more programming timeslots to smaller groups of people (groups of three) and also held a walking program.

<u>Sherbrooke "Moving On"</u> program is situated in a long-term care facility, and therefore could not offer inperson programming throughout 2020-21. Instead, they connected to their clients through phone wellness checks, sending out activity packages and having 1:1 socially-distanced outdoor visits. Staff also took time for resource and professional development.

# ABIIS Service Time Breakdown in 2020-21:

Day Programming also leveraged virtual communication options in 2020-21, primarily phone communication.

	2019-20	2020-21			
Virtual Modifications					
Phone	0%	50%			
Electronic (e.g., video,					
email)	0%	5%			
Modified In-Person					
On site	100%	35%			
Off-site In-Town	0%	9%			
Source: Acquired Brain Injury Information System					

While time spent on in-person services decreased (e.g. Recreation

and Leisure, 8% to 2%, Recreation Therapy, 28% to 17%), additional time was spent on giving clients psychosocial support, which increased substantially in 2020-21 (69% of total service time versus 52% in the previous year).

#### Valuing the Unique Service Role and Impact of Day Programming:

Social participation has been documented in the literature<sup>[33]</sup> as an important means to enhance survivors' quality of life – a primary goal of the ABI Partnership. Studies have shown that individuals with brain injuries who report **greater participation in the community** have improved outcomes in physical and cognitive abilities, adjustment, and quality of life<sup>[34, 35]</sup>.

Independent Living & Residential					
Funded Programs         1. Sask North Independent Living (Prince Albert)         2. Phoenix Residential Society, PEARL Program – Residential and Community Support (Regina)         3. SIGN (Yorkton)         Independent Living Flex Funds for:         4. former Sun Country RHA         5. former Cypress RHA         6. former Five Hills RHA         7. former Prairie North RHA	Average Annual Funding SGI Funding: \$816K % of Total Partnership Budget: 16% Partner Investment: \$226K				

## Service Description

Following brain injury, many ABI survivors need help with securing appropriate residential placement options, and also require assistance in developing and maintaining life skills (e.g., budgeting, cooking, Instrumental/Activities of Daily Living), as well as behavioural and medical

ABI Partnership Project: 2019-21 Program Review

support to live as independently as possible in their communities. ABI-funded independent living programs 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.

Independent Living programs provide services such as: life skills, rehabilitation, recreational activities, and a/vocational support. The PEARL Program is a transitional supported apartment program, and is the only "bricks and mortar" ABI-funded program. In addition to the PEARL Program, Phoenix Residential Society also delivers ABI community support services throughout Regina, similar to those offered through the Sask North Independent Living program in Prince Albert and the SIGN program in Yorkton. The Independent Living flex funds offer individualized, contracted independent living support as needed and are overseen by the ABI Coordinators.

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

## Annual Program Utilization in 2019-20

**Registered Clients:** 81 clients (8% of the Partnership's total registrations) **Direct Client Service Events:** Accounts for 29% of all Partnership service events

Top 5 Service Events	Percent of Total Direct Client Service Time
Recreation & Leisure Activities	26%
Life Skills Training	17%
Psycho-Social Services	15%
Discipline Specific Therapy	12%
Residential Services	5%
% of Independent Living and Residential Total Service Time	75%

Registered Clients - Top 5 Referral Sources for Clients Seen by Independent Living & Residential Programs in 2019-20

III 2019-20	
Place or Agency that Referred Client to Independent Living or Residential Program	<b>Proportion of Clients</b>
ABI Regional Coordinator	22%
Other Health Care Professionals	19%
ABI Outreach Team	16%
Client Self-referrals	8%
Family	6%
Total	71%

ABI Partnership Project: 2019-21 Program Review

## **COVID Service Innovations**

	Vir	tual Modificati	ons	Мо	dified In-Per	son	Program	Development
Due succes A use	Phone/Video Chat	Online Education/ Activities	Email/ Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement
Program Area								
PEARL		1		✓	✓	✓	✓	
SK North	√	✓	√	√		✓		
SIGN	✓		✓	✓		4		✓

The <u>PEARL Program</u> made grocery drops in the early days of the pandemic to ensure clients' food security needs were being met; they also secured a grant to purchase tablets to enable clients' continued social connection to their family while in lockdown and their access to virtually-delivered group activities.

<u>SIGN</u> provided more frequent but less time-intensive client check-ins to provide information and maintain psychosocial support (with all clients on caseload remaining stable throughout the duration of remote work). Quality improvement work undertaken included transitioning to an electronic filing system allowing real-time access to client reports.

<u>SK North Independent Living</u> tailored much of its typically delivered group programming to 1:1 activities and pivoted to virtual options such as phone 'bookclub' and craft projects, as well as holding online cooking classes.

#### ABIIS Service Time Breakdown in 2020-21:

Independent Living programs connected more with clients via phone and electronically in 2020-21.

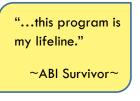
Similar to Day programs, time spent on recreation and leisure decreased (26% to 14%). Additional time was spent on psychosocial support (27% of total service time versus 15% in the previous year).

	2019-20	2020-21
Virtual Modifications		
Phone	11%	48%
Electronic (e.g., video, email)	2%	6%
Modified In-Person		
On site	5%	2%
Off-site In-Town	48%	40%
Off-site Out-of-Town	34%	4%

Source: Acquired Brain Injury Information System

#### Valuing the Unique Service Role and Impact of Independent Living/Residential Options:

The mandate of the ABI Partnership is to increase the functional independence and quality of life of ABI survivors. One of the main ways this is achieved is by supporting ABI survivors with life skills that promote their highest level of independence possible.



Supporting clients to achieve their independent living goals mitigates their potential housing insecurity. Enhancing survivors' life skills

increases their independence, thus relieving caregiver burden for those who remain living with

family. For others who want and are able to live on their own, these supports help them maintain their independence by reducing safety risks through regular staff check-ins and help to maintain their stability through continued life skills support. Family members value that the support given to their loved ones allows family to move out of their 'caregiver' role and re-establish normal interactions with the ABI survivor.

## Life Enrichment

#### Funded Programs

- 1. SaskAbilities (Saskatoon)
- 2. SaskAbilities (Regina)
- 3. SaskAbilities (Yorkton)

#### Average Annual Funding

SGI Funding: \$153K % of Total Partnership Budget: 3% Partner Investment: \$215K

#### Service Description

These programs promote and facilitate personal and social rehabilitation, through recreation and leisure activities for those that may not be capable of returning to the competitive workforce in the short- or long-term. Based on client interests, activities are organized individually or for a group. By involving clients in community activities these programs expose clients to new experiences and develop their social skills.

ABI Life Enrichment programs assist persons with an ABI to make social, recreational, and leisure connections to the community, reducing their social isolation and in turn increasing their community integration. Through participation in these activities their physical and mental health and overall quality of life are enhanced.

## Annual Program Utilization in 2019-20

**Registered Clients:** 78 clients (7% of the Partnership's total registrations) **Direct Client Service Events:** Accounts for 8% of all Partnership service events

Top 5 Service Events	Percent of Total Direct Client Service Time
Recreation & Leisure Activities	92%
Administration	6%
Case Management	1%
Educational Services	1%
Consultation/Education/Training	0.3%
% of Life Enrichment Total Service Time	100%

Registered Clients - Top 5 Referral Sources for Clients Seen by Life Enrichment Programs in 2019-20					
Place or Agency that Referred Client to Life Enrichment Program	Proportion of Clients				
ABI Outreach Team	29%				
ABI Regional Coordinator	20%				
Long Term Care/Special Care Homes	8%				
Other Health Professionals	6%				
Family	4%				
Total	66%				

#### **COVID Service Innovations**

	Virtual Modifications		Modified In-Person			Program Development		
	Phone/Video Chat	Online Education/ Activities	Email/ Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement
Program Area								<b>N</b>
SaskAbilities Regina	4	4	4			4	✓	✓
SaskAbilities Saskatoon	4	4	4		4	4	✓	
SaskAbilities Yorkton	4	4			4	4	4	
All branches provided clients access to a Remote Technology Loaner Program (iPads) to facilitate virtual service.								
SaskAbilities Regina and Yorkton referenced the provision of safe outdoor activities such as park walks to								

All branches provided clients access to a Remote Technology Loaner Program (IPads) to facilitate virtual service. <u>SaskAbilities Regina and Yorkton</u> referenced the provision of safe outdoor activities such as park walks to maintain safety and promote physical and mental health. Starting in fall 2020 the Regina program also offered a suite of 4 virtual activities a day/5 days a week to provide clients programming choice. Implementing goal planning with new (My Compass) software is an example of a Quality Improvement initiative undertaken. <u>SaskAbilities Saskatoon and Yorkton</u> both provided activity package drop-offs and accompanied the supplies with online activities such as pottery.

#### ABIIS Service Time Breakdown in 2020-21:

Life Enrichment leveraged virtual communication options in 2020-21, but also managed to safely deliver some in-person service.

Similar to Day programs and independent living, time spent on recreation and leisure decreased (92% to 64%). Additional time was spent on life skills training (20% of

	2019-20	2020-21
Virtual Modifications		
Phone	2%	25%
Electronic (e.g., video, email)	3%	39%
Modified In-Person		
On site	4%	11%
Off-site In-Town	77%	18%
Off-site Out-of-Town	14%	7%

Source: Acquired Brain Injury Information System

total service time versus 0% in the previous year).

#### Valuing the Unique Service Role and Impact of ABI Life Enrichment Programming:

Through access to client-centered, communitybased activities, this programming engages ABI survivors to develop meaningful peer relationships and to achieve a healthy lifestyle through support for their physical and mental health. By increasing their community participation, it reduces social isolation and loneliness, and aims to also build independence, thereby improving self-confidence. A secondary impact/outcome is the family respite such programming provides.

The ABI people helped me get my life back. I had no desire to live...I couldn't work so I didn't want to be here. I had given up. I didn't think anyone could help me. The ABI Life Enrichment worker listened to me as I told her my plight. She listened and listened. She found information for me...found a way for me to have a purpose...told me to pursue a hobby. That hobby makes me want to get up in the morning. Thank-you.

~ABI Survivor~

"What the program is doing for (ABI survivor son) is incredible as he is a changed person. The program has done more for (him) than anyone has. My son is hugging me again which he hasn't done since he was little and his confidence is so high and we are all going on a date."

~ABI Family Member~

Research has shown that greater participation in social and recreational activities has been associated with higher rates of return to work, higher income and less depression<sup>[36]</sup>.

## **Children's Programming**

#### **Funded Programs**

1. Radius (Saskatoon)

#### Average Annual Funding

SGI Funding: \$135K % of Total Partnership Budget: 3% Partner Investment: \$12K

## Service Description

Radius Community Centre, located in Saskatoon, is the only program within the ABI Partnership that offers programming exclusively for children and youth. The goal of Radius' ABI 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 within the community;
- assist community integration by linking participants to existing community resources in their home communities; and,
- advocate on behalf of participants to help reduce barriers and improve community participation.

In response to past program evaluation findings, Radius has expanded its programming by increasing the age-range of services offered (e.g., the Sports for Life program is open to ABI survivors up to 29 years of age). In 2014, it also began offering the Parent Knowledge Exchange Program which provides structured education and support opportunities that address the needs of families of ABI survivors.

## Annual Program Utilization in 2019-20

**Registered Clients:** 23 clients (2% of the Partnership's total registrations) **Direct Client Service Events:** Accounts for 1% of all Partnership service events

Top 5 Service Events	Percent of Total Direct Client Service Time
Recreation & Leisure Activities	86%
Vocational Services	5%
Case Management	5%
Administration	3%
Consultation/Education/Training	0.4%
% of Children's Program Total Service Time	99%

Registered Clients - Top 5 Referral Sources for Clients Seen by the Children's Program in 2019-20						
Place or Agency that Referred Client to Children's Program	<b>Proportion of Clients</b>					
ABI Outreach Team	46%					
Family	18%					
Other Health Care Professionals	13%					
Education System	11%					
Mental Health Services	5%					
Total	94%					

#### **COVID Service Innovations**

	Virtual Modifications		Modified In-Person			Program Development		
	Phone/Video Chat	Online Education/ Activities	Email/ Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement
Program Area								
Radius	✓	✓	✓			✓	✓	✓

Radius enhanced their communication through various means in order to address the additional need clients and their families had for information/education and ongoing psychosocial support during the pandemic. The Program Coordinator checked in virtually during the early days of the pandemic. Some modified group activities (e.g., the Youth Art program) safely resumed in June, and in-person support was offered through the Summer Fun program in July & August. Outdoor activities were encouraged where possible (with access to public washrooms being a primary consideration while on outings). As a quality improvement initiative, Radius staff developed an Evergreen library of online art and exercise resources for future use.

#### ABIIS Service Time Breakdown in 2020-21:

Radius leveraged virtual communication options in 2020-21, but also managed to safely deliver service in person.

More Case Management was delivered in 2020-21 (15% of total service time vs 5% the previous year). Recreation & Leisure Activities remained the primary service, at about 85% each year.

	2019-20	2020-21
Virtual Modifications		
Phone	0%	2%
Electronic (e.g., video, email)	0%	14%
Modified In-Person		
On site	9%	20%
Off-site In-Town	89%	64%

Source: Acquired Brain Injury Information System

#### Valuing the Unique Service Role and Impact of ABI Children's Programming:

"Honestly, I'd have nothing to look forward to each week. I love Radius!" ~ABI Survivor Radius ABI Community Integration Service is the only ABI program funded to provide dedicated support to children and youth. They have remained responsive to changing needs, and have expanded their programming age limit (to 29 years) in their

Sports for Life program. They continue to address the unique informational and support needs of

parents/families, and ensure their staff receive training to enable programming that is culturally sensitive to clients who are Indigenous or newcomers to Canada.

"...things would have been so much harder for my son with school if we didn't have Radius as part of our support network or a support worker to take him out. This has been so important for our family because my son has a difficult time getting out of the house."

~ABI Family Member~

Survivors and their families appreciate the social and recreational opportunities that Radius' Community Integration Service provides to them.

# Funded Programs Average Annual Funding 1. SaskAbilities (Saskatoon) SaskAbilities (Regina) 2. SaskAbilities (Regina) SGI Funding: \$220K 3. Multiworks (Meadow Lake) % of Total Partnership Budget: 4%

## Service Description

The goal of ABI vocational programming is to improve the quality of life of survivors by increasing their functional productivity and community integration. Multiworks facilitates a mix of vocational, life enrichment, and quality of life goals and offers ongoing vocational support through their sheltered workshop. SaskAbilities' Partners in Employment (PIE) programs help clients develop a vocational plan, provide vocational services to reduce barriers to employment goals, and provide employment supports to assist clients in maintaining employment. Types of supports include: work readiness and skill development, individualized job search training, resource centre access, pre-employment placement, job development, job match, job accommodation and coaching, regular follow-up meetings with clients and/or their employers, and sharing information regarding ABI with employers and staff.

## Annual Program Utilization in 2019-20

**Registered Clients:** 116 clients (11% of the Partnership's total registrations) **Direct Client Service Events:** Accounts for 7% of all Partnership service events

Top 5 Service Events	Percent of Total Direct Client Service Time
Life Skills Training	74%
Vocational Services	20%
Administration	5%
% of Vocational Program Total Service Time	99%

Registered Clients - Top 5 Referral Sources for Clients Seen by Vocational Programs in 2019-20					
Place or Agency that Referred Client to Vocational Program	Proportion of Clients				
ABI Outreach Team	46%				
Client Self-referrals	20%				
Family	8%				
Vocational/Avocational Services	5%				
Social Services	4%				
Total	83%				

ABI Partnership Project: 2019-21 Program Review

## **COVID Service Innovations**

	Virtual Modifications		Modified In-Person			Program Development		
Program Area	Phone/Video Chat	Online Education/ Activities	Email/Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement
SaskAbilities Regina SE	4	4	4			4	4	✓
SaskAbilities Saskatoon SE	4	4	4			4	1	✓
Multiworks	✓	✓			1	✓	✓	

ABI Vocational programs provided service delivery options to best support clients through the uncertainty brought on by COVID. For example, <u>SaskAbilities Regina</u> offered clients the choice to attend a 20-session Job Readiness workshop series virtually, instead of in-person.

<u>SaskAbilities Saskatoon</u> offered a 'Place and Train' approach to job placements (instead of the traditional approach of 'Train and Place', where clients need to rely on the natural supports on the job).

Through the purchase of tablets, <u>Multiworks</u> provided their clients access to technology so that they could stay virtually connected – both socially and in terms of productive activity.

#### ABIIS Service Time Breakdown in 2020-21:

Multiworks offered safe in-person services, working entirely on life skills training (100% of service time).

The Saskatchewan Abilities Council – Supported Employment programs leveraged virtual communication options in 2020-21, working primarily on vocational services in both years.

#### Valuing the Unique Service Role and Impact of ABI Vocational Programming:

Multiworks offers long-term support to ABI clients in their

	2019-20	2020-21
Virtual Modifications		
Phone	11%	34%
Electronic (e.g., video, email)	7%	52%
Modified In-Person		
On site	65%	5%
Off-site In-Town	17%	9%

Source: Acquired Brain Injury Information System

"Because I had such a severe brain injury, I couldn't focus on getting a job and my lack of technical skills, I hate technology and the program helped me with everything that has become difficult in my life because of my brain injury."

~ABI Survivor~

sheltered workshop in Meadow Lake.

The two vocational programs funded through SaskAbilities offer support with job

"This program helped me get a job, something that would have been very difficult without the services."

~ABI Survivor~

accommodations and follow up support to ABI clients and their employers that is specific to their needs; relationships are developed with the employer, which increases the opportunity for employment retention and advancement for the client.

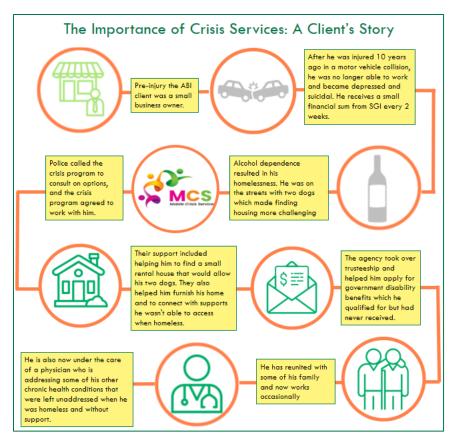
Evidence suggests that specialist knowledge of both vocational rehabilitation and ABI is more likely to improve the chances of

someone with ABI returning to work. Therefore, having dedicated vocational programs for ABI survivors to address their return to work goals increases the likelihood of successful employment outcomes<sup>[24].</sup>

Crisis					
Funded Programs	Average Annual Funding				
<ol> <li>Saskatoon Crisis Intervention Services (Saskatoon)</li> <li>Mobile Crisis (Regina)</li> </ol>	SGI Funding: \$140K % of Total Partnership Budget: 3% Partner Investment: \$343K				

## Service Description

Crisis management programs are designed to serve those ABI survivors that are non-compliant, hard to serve, or difficult to manage. These clients experience chronic crisis and instability, often leading to unmet physical, mental, psychosocial, or basic needs. For these clients, mainstream services have been unavailable or unsuccessful. Crisis services are accessible 24 hours per day, 365 days of the year.



Crisis programs work to stabilize the ABI client's immediate condition (e.g., medical and/or psychiatric interventions, emergency housing, and financial help) to ensure their safety in the community and enable them as much independence as they can manage.

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 and mentoring.

The ultimate goals of these programs are to: reduce crisis behaviour, enhance client functioning, and achieve progress on service plan goals. Service goals include:

- maintaining housing, money management, active engagement in appropriate treatments;
- reducing mental health risk behaviour, substance overuse, aggressive behaviour, justice system involvement;
- maintaining stable basic needs such as shelter, food, clothing, health care, and other goals; and,
- Crisis Intervention Services in Saskatoon also provides financial trusteeship.

#### Annual Program Utilization in 2019-20

**Registered Clients:** 26 clients (2% of the Partnership's total registrations) **Direct Client Service Events:** Accounts for 3% of all Partnership service events

Top 5 Service Events	Percent of Total Direct Client Service Time			
Case Management	94%			
Residential Services	2%			
Discipline Specific Therapy	1%			
Vocational Services	1%			
Life Skills Training	1%			
% of Crisis Program Total Service Time	99%			

Registered Clients - Top 5 Referral Sources for Clients Seen by Crisis Programs in 2019-20					
Place or Agency that Referred Client to the Crisis Program	Proportion of Clients				
ABI Outreach Team	30%				
Mental Health Services	14%				
Community Services	8%				
Justice/Legal/Police Services	8%				
Aboriginal Community	6%				
Total	67%				

## **COVID Service Innovations**

	Virtual Modifications		Modified In-Person			Program Development		
Program Area	Phone/Video Chat	Online Education/ Activities	Email/Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement
Mobile	√		-	√		✓		
Saskatoon Crisis	1		1	4		1		
Saskatoon Crisi	Saskatoon Crisis maintained in-person services throughout the pandemic by instituting a variety of public health							

<u>Saskatoon Crisis</u> maintained in-person services throughout the pandemic by instituting a variety of public health measures to ensure the safety of staff and clients such as: leasing additional office space to enable physicallydistanced service, PPE usage, enhanced sanitization measures, and plexiglass barriers in vehicles for safe client transport. A team approach to caseload management ensured no service disruption if staff needed to self-isolate. <u>Mobile Crisis</u> staff worked remotely but were available to meet clients in-person if needed.

Both programs indicated there was a greater need to collaborate across agencies and work creatively to problem solve to address clients' immediate needs and coordinate access to services (which were often unavailable or much reduced).

#### ABIIS Service Time Breakdown in 2020-21:

Crisis programs leveraged phone communication, but also managed to safely deliver service in person. The primary service remained case management (approximately 95% each year).

Virtual Modifications		
Phone	27%	57%
Modified In-Person		
On site	54%	24%
Off-site In-Town	18%	19%
Source: Acquired Brain Injury Inform	ation System	

2019-20

2020-21

#### Valuing the Unique Service Role and Impact of ABI Crisis Programming:

This is the only ABI program component funded to address the needs of a hard-to-serve subpopulation.

Knowledgeable staff address an array of basic needs of hard-to-serve clients, resulting in significant avoided costs to health and other service systems (e.g., policing, corrections). Money is saved, for example, helping clients to address their medical and other needs in a non-emergent fashion, such as coordinating a visit to a primary care clinic versus having them present to the ER (\$800/visit) or require inpatient psychiatric admission (\$1000/day)<sup>11</sup>.

Rehabilitation					
<b>Funded Programs</b> 1. Speech Language Pathology (SLP) services (Melfort)	Average Annual Funding SGI Funding: \$51K % of Total Partnership Budget: 1% Partner Investment: \$39K				

## Service Description

Prior to 1997, there was no adult Speech Language Pathology (SLP) service for ABI survivors in the former Kelsey Trail Health Region. This program was designed to provide individualized services to those who have speech, language, swallowing, and/or cognitive difficulties as a result

<sup>&</sup>lt;sup>11</sup> United Way Saskatoon & Area, Publicly Funded Service Usage Data, 2017

of an ABI. 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.

## Annual Program Utilization in 2019-20

**Registered Clients:** 23 clients (2% of the Partnership's total registrations) **Direct Client Service Events:** Accounts for 0.5% of all Partnership service events

Service Events	Percent of Total Direct Client Service Time
Speech Language Interventions	74%
Administration	13%
Cognitive Interventions/Training	7%
Case Management	6%
% of Rehabilitation Program Total Service Time	100%

Registered Clients - Top 5 Referral Sources for Clients Seen by Rehabilitation Programs in 2019-20					
Place or Agency that Referred Client to the Rehabilitation Program	Proportion of Clients				
Other Health Care Professionals	93%				
Family	3%				
ABI Partnership Program (ABI Outreach and Other)	3%				
Other Health Services	1%				
Total	100%				

## **COVID Service Innovations**

Virtual Modifications		Modified In-Person			Program Development			
Duo anona Anna	Phone/Video Chat	Online Education/ Activities	Email/ Mail	Urgent Services	Drop offs	Safety Measures	e- resources	Quality Improvement
Program Area				<b>AI</b>				Č
Melfort SLP	✓	✓	✓	✓		✓	1	
The program offe	ered phone con	nsults, only,	in the early m	onths of the	e pandemic	, followed	by virtual	therapy
appointments thr	ough secure vi	deoconferer	ncing (Pexip),	and clients	were also	sent home	programs.	Clients were
also seen in-person on an as-needed basis. Virtual appointments were positively received by the program's								
clients. Clients found them safe (from home) and convenient (no travel required). Due to the savings of travel								
time, the SLP pro	ogram was also	o able to off	er appointmen	ts more free	quently (i.e	e., weekly i	nstead of r	nonthly).

#### ABIIS Service Time Breakdown in 2020-21:

The SLP in Melfort primarily offered virtual services in 2020-21 (86% of total service time). The primary service continued to be Speech Language Interventions (over 70% of service time both years).

#### Valuing the Unique Service Role and Impact of ABI (SLP) Rehabilitation Program:

The program offers direct therapy (swallowing, speech, language, cognitive assessment, and therapy). It is a specialized service, offering the only speech-language support for adult brain injury survivors in the former Kelsey Trail Health Region service area. Earlier discharges home from acute care can be achieved by having access to this specialized service, resulting in reduced costs and better psychosocial outcomes for survivors.

## **Provincial Overview – Education and Injury Prevention**

In Canada, as in many countries around the world, intentional and unintentional injuries continue to be one of the leading causes of death, particularly among people between the ages of one and 44 years. At the same time, injuries are considered one of the most preventable health problems, with 90% of injuries estimated as preventable<sup>[2].</sup>

The human cost of injury brings pain, suffering and diminished health and well-being to individuals and their families. It impacts our potential to live long lives to the fullest.

Saskatchewan has one of the highest injury rates in Canada. In 2018, injury cost residents of Saskatchewan \$1.2B.

#### In 2018, injuries in Canada resulted in:

- 17,475 deaths
- 61,400 disabilities impacting potential for economic independence
- 231,530 hospitalizations
  - 4.6 million emergency department visits
- \$20.4 billion in direct health-care costs
- \$29.4 billion in total economic costs

The overall rate of death due to injury increased between 2010 and 2018, from 43.25 to 47.15 per 100,000 population. Falls and transport incidents had the highest total costs in 2018. These two causes combined were \$13.8 billion (47 per cent) of the total cost of injury<sup>[29]</sup>. Because of the heavy human and economic toll taken due to falls and transport incidents, much of the Partnership's injury prevention programming is dedicated to these areas. The ABI Partnership has supported injury prevention from the beginning with dedicated funding going toward programs and communities.

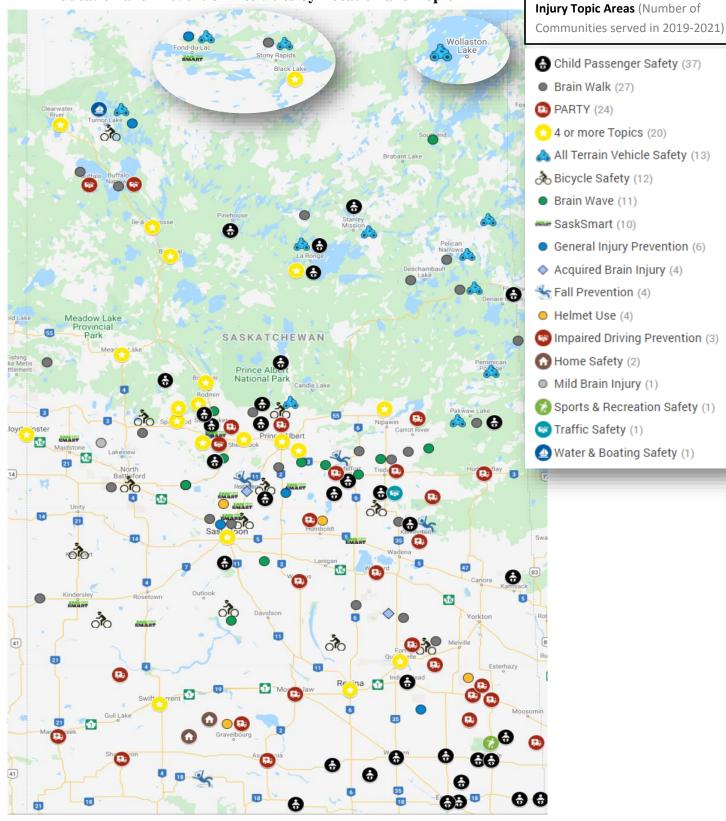
The five funded education and prevention programs work to educate communities about brain injuries and about how to prevent them. Many programs that primarily provide direct client service also deliver or facilitate injury prevention events, support groups, and other community groups for a variety of audiences.

This contract period, ABI Partnership programs worked with 292 communities on injury prevention activities.

Injury Topic	Number of Communities	
Acquired Brain Injury	14	
All Terrain Vehicle Safety	22	
Bicycle Safety	21	
Brain Walk	34	
Brain Wave	18	
Child Passenger Safety	50	
Fall Prevention	10	
General Injury Prevention	14	
Helmet Use	6	
Home Safety	5	
Impaired Driving Prevention	10	
Mild Brain Injury	7	
PARTY	37	
SaskSmart	18	
Snowmobile Safety	4	
Sports & Recreation Safety	4	
Traffic Safety	5	
Water & Boating Safety	6	
Other Injury Topics (e.g., school bus safety, farm safety, pedestrian safety, etc.)	7	
Grand Total	292	

Source: Acquired Brain Injury Information System

The map on the next page shows all of the communities that funded agencies have engaged with regarding education and injury prevention activities.



#### **Education and Prevention Activities by Location and Topic**

Source: Acquired Brain Injury Information System

ABI Partnership Project: 2019-21 Program Review

## **Program Type Summaries -Education and Injury Prevention**

## Provincial Education and Prevention Coordinator -Service Description

A summary of each education and injury prevention program type funded by the ABI Partnership is outlined in the following pages, including the amount of Partnership funding this contract period, partner investments, a summary of the services delivered, the most frequently reported service events in the ABI Information System (ABIIS), and value add information.

The ABI Partnership funds a Provincial ABI Education and Prevention Coordinator position that operates as part of the ABI Provincial Office. The primary role of this position is to coordinate prevention, education, and research activities related to ABI with the Saskatchewan Health Authority (former regional health authorities), community agencies, survivors, and family members throughout Saskatchewan. Some of the key activities supported by this position are described below.

#### NEWSLETTER

In January 2015, the ABI Provincial Office re-introduced the program's newsletter at the request of the funded programs. The newsletter contains staffing updates, upcoming events, stories, and content from funded programs, educational information, and more.

In order to assist in the 'new normal' of remote work, virtual client support and our COVID reality, 2020-21 newsletters included content regarding online resources available to learn more about COVID, as well as measures to take to live and work safely and stay well during the pandemic such as:

- Tips for working remotely/virtually
- Tips for delivering virtual client activities
- COVID information and resources
- Self-care tips
- Virtual Mental health support (e.g., SPI's Child Anxiety during a Pandemic Helping them Cope, a live and recorded session; The Canadian Mental Health Association's BounceBack® program)



#### INTRODUCTION TO ABI ONLINE SERIES

This series continues to get attention from our website viewers with over 550 views this contract period, or an average of 3 video views every 4 days<sup>12</sup>. The top video viewed this contract period was "Recreation and Leisure Following Brain Injury" accounting for 17% of all views. The other top four videos accounted for another third of all videos viewed: Brain and Brain Injury Parts 1 and 2, Substance Abuse and ABI, and Mental Health and ABI.

ACQUIRED BRAIN INJURY		e only cure for l ury is PREVENT	
Partnership Project			-
Welcome to A	ABI Partnership	What's New	Text size: A*   A   .
Project		SBIA's survivor and family camp will be held June 8th-	Ed.
The A copied from large Pathemish Project is an invocinity aptembolic between Stakabitsen Government Insurance (SGI) and the Sakabitsen Pathemist State (SGI) and the Sakabitsen Pathemist Service and any approximation of support for particular with accurate Danin spaties and the trainies. Our goal is to provide individual and their support for trainies. Comparison of the service of the spaties and the support of the statebolic and their support to statebolic and their service of the spatiest to the spatiest service and support to Statebolic and models and the spatiest service of the spatiest service and spatiest to statebolic and the spatiest service of the spatiest service and spatiest service of the spatiest service of the spatiest service and spatiest service of the spatiest service of t		10th at Arlington Beach Camp & Conference Centre. more	
		"There are many support groups, programming opportunities, and events	
		occuring throughout the province. more	

#### WEBSITE

On April 1<sup>st</sup>, 2010, the Acquired Brain Injury Partnership Project website was unveiled: <u>www.abipartnership.sk.ca</u>. The purpose of the website was to improve the publicity of the ABI Partnership and to provide more timely access to information and resources.

The website has an average of over 620 unique visitors each

month. Half of the website hits are from Saskatchewan IP addresses, but the website receives traffic from across the world. Most Saskatchewan website hits are from Regina and Saskatoon (78%), though there are hits from all across Saskatchewan (e.g., December to mid-May, 2021 saw hits from 44 Saskatchewan communities).

The top ten visited pages accounted for 35% of all page views, and included content for survivors, families, and service providers, suggesting that the website is meeting the needs of these different audiences

	Top 10 Visited Website Pages*					
1	Contact Us – form to send ABI Partnership questions					
2	Contact Us - ABI Outreach Teams					
3	Community ABI Programs					
4	Substance Use					
5	Introduction to ABI - Online Training Series					
6	About Us - Information about the ABI Partnership Project					
7	Access to Services					
8	Local Support Groups					
9	Research and Evaluation					
10	Mental Health					
	Average Page Views Per Month2,295					

\*Does not include the home page, website search or staff login page

<sup>&</sup>lt;sup>12</sup> An average of 277 video views per year this contract period.

Over 2,100 downloads from the website occurred between December 1, 2020 and May 15, 2021. The variety of documents downloaded show the variety of needs being met. Downloads include (but are not limited to):

- **Resources for Survivors and Families**. The Outreach Team pamphlet, ABI Survival Guide, fact sheet on ABI and Anxiety, fact sheet on ABI and Psychosis, pamphlet on the ABI Partnership Project, ABI Partnership Project: A Summary of Programs and Services, and the map of ABI programs made up 18% of all downloads.
- **Resources on Concussion**. *Recovering From Mild Brain Injury: A Guide for Patients, Concussion at Play (CDC)*, and *A Change in Consciousness (University of SK)* made up 12% of all downloads.
- **Resources on the ABI Partnership project**. ABI Partnership Project Program Reviews and *ABI: A Strategy For Services* made up 11% of all downloads
- **Resources for ABI Partnership Staff**. The MPAI manual and the ABI Partnership phone list made up 9% of all downloads.
- **Injury Statistics**. The *Saskatchewan Comprehensive Injury Surveillance Report, 1995-*2005 and the *Injury in Review – 2020 Edition* (Public Health Agency of Canada), made up 6% of all downloads
- **Injury Prevention Services and Training**. The Injury Prevention Services Pamphlet, Acquired Brain Injury Education and Prevention Services fact sheet, and information about the Canadian Falls Prevention Curriculum made up 5% of all downloads.

#### **PROFESSIONAL DEVELOPMENT**

The ABI Partnership has always recognized the importance of professional development and continuing education that enhances the delivery of services to survivors and families under the program. The following table shows the programs that were facilitated and/or funded in the 2019-20 and 2020-21 fiscal years:

#### **EDUCATION EVENTS COORDINATED OR SPONSORED**

Event	Date/Location	Sponsored Amount
Canadian Indigenous Culture Training Truth and Reconciliation Edition Indigenous Leadership Development Institute of Canada	Ongoing online opportunity 2019	Spots were \$50/sponsored 60 Partnership staff participated
Cognitive Rehabilitation for Acquired Brain Injury	September 27 & 28, 2019	Sponsored \$2K to lower
Jennifer Ostergren PhD, CCC-SLP	Regina, SK	registration costs
2019 ABI In-service "Cannabis 101: What we know and what remains to be determined." Dr. Robert Laprairie, PhD "Nutritional approaches and interventions complimentary and supportive of other therapies in assisting with the achievement of rehabilitation goals." Cailee Farough, RD "Traumatic brain injury: anatomy, physiology concepts and neuropsychiatric issues" Dr. Abe Snaiderman, MD, FRCP (C)	Oct 24 – 25, 2019 Saskatoon, SK	Entirely sponsored event 71 Partnership staff and SGI participants
Online Concussion Certificate Course – University of Calgary	Ongoing 2019-20	Free of charge; all Education & Prevention positions completed course as well as several other Partnership staff
Introductory Motivational Interviewing	Oct-Dec 2020 & Jan-Mar 2021	Sponsored registration cost of
Saskatchewan Prevention Institute	Online	\$125 for Partnership staff
Advanced Motivational Interviewing	Jan – Mar 2021	Sponsored registration cost of
Saskatchewan Prevention Institute	Online	\$125 for Partnership staff
Brain Injury Canada Conference	June 2-3, 2021 online	Sponsored full registration
World Congress on Brain Injury	July 28-30, 2021 online	Sponsored full registration

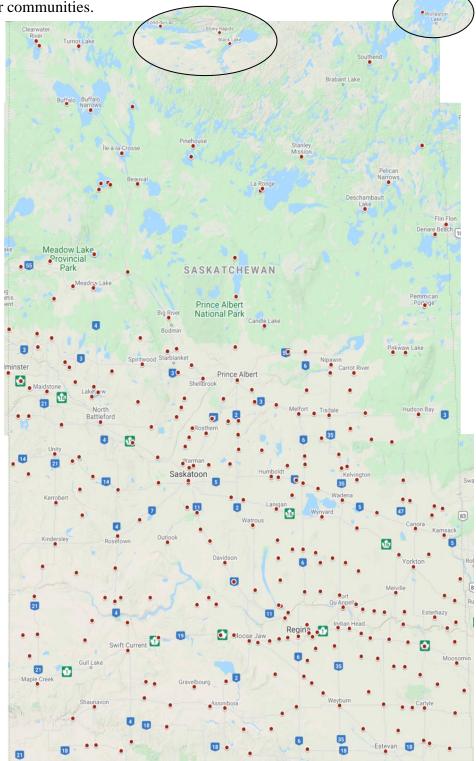
## TRAFFIC SAFETY AND INJURY PREVENTION COMMUNITY GRANTS

Since 1997, the Provincial Education and Prevention Coordinator has co-chaired the Traffic Safety and Injury Prevention Community Grant program in partnership with SGI. The goal of this grant program is to enable community groups to establish, enhance, and deliver programs that address safety issues in their communities.

This program is jointly funded by SGI and the Ministry of Health, through the ABI Partnership Project. In recent grant cycles, SGI has provided additional funding specifically targeted to road safety issues.

## TRAFFIC SAFETY AND INJURY PREVENTION COMMUNITY GRANTS AWARDED SINCE 1997

- Over \$2.35M has been awarded to Saskatchewan organizations through community grants.
- Over two thousand four hundred projects have been funded (2,468).
- 16 urban, 257 rural including 20 First Nations communities have received grants.
- More grants have been awarded to rural communities, although more funding has gone to urban communities (1,589 rural grants at \$1.02M vs. 879 urban grants at \$1.32M).

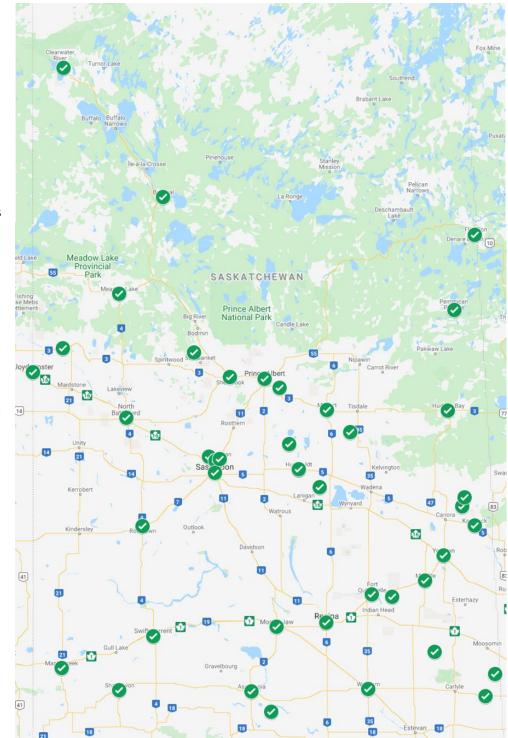


## TRAFFIC SAFETY AND INJURY PREVENTION COMMUNITY GRANTS AWARDED IN 2019-20 AND 2020-21

- \$111,557 was awarded to Saskatchewan organizations through community grants.
- 85 projects were funded.
- 16 urban, 26 rural including 4 First Nations communities received grants.
- Rural communities received 29 grants at \$25,219 and urban communities received 56 grants at \$86,338.

Types of projects funded include:

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



## **Education and Prevention Programs**

Funded Programs	Average Annual Funding
<ol> <li>South Education and Prevention Coordinator (Regina)</li> <li>Central Education and Prevention Coordinator</li></ol>	SGI Funding: \$542K
(Saskatoon) <li>North Education and Prevention Coordinator</li>	% of Total Partnership Budget:
(Prince Albert) <li>SK Prevention Institute - Child Injury Prevention</li> <li>SK Brain Injury Association – Survivor and Family</li>	10%
Education	Partner Investment: \$688K

## Education and Prevention Coordinators - Service Description

Three Regional Education and Prevention Coordinator positions deliver services to the south, central and northern areas of the province – see provincial service map on page 10 that demarcates the service areas by color: blue (south), yellow (central), and green (north).

The purpose of these positions is to support community-based injury prevention and brain injury education initiatives by:

- promoting the need for injury prevention and ABI education initiatives in communities,
- engaging communities to become involved in injury prevention,
- assisting communities to plan, implement, and evaluate injury prevention initiatives,
- facilitating the introduction of injury prevention programs (e.g., Brain Walk, PARTY) to communities,
- recognizing and building capacity within communities to identify and address injury issues using available resources and data,
- initiating and maintaining partnerships with other agencies, community members, other health professionals, and other ABI funded programs, and
- research, development, and distribution of information and resources about the brain, brain injury, and injury prevention.

## Annual Program Utilization in 2019-20

Attendees at Coordinated and Delivered Events: 12,075 Number of Recipients of Promotion and Resources: 3,168 Number of Communities Worked with: 109

The three ABI Education and Prevention Coordinators delivered and/or coordinated events in 14 topic areas to over 12,000 attendees.

ABI Partnership Project: 2019-21 Program Review

The Five Most Attended, Directly Delivered and/or Coordinated Events by Education and Prevention Coordinators, 2019-20

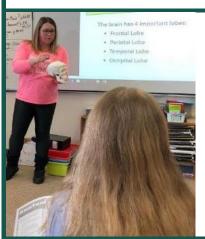
Topic Area	# of Attendees
Brain Walk	3,503
PARTY	2,465
Bicycle Safety	1,642
Snowmobile Safety	1,595
Child Passenger Safety	1,159
Grand Total	12,075

Descriptions of common Education and Prevention programs are as follows.

#### **Brain Walk**

Brain Walk provides grades K-6 students with an opportunity to learn about the different functions of the brain, and how to keep their brains safe and healthy. Students rotate through 10 interactive volunteer-run stations, filled with displays, demonstrations, and activities.





#### **Mild Brain Injury**

The Coordinators provide education and resources for individuals who have sustained a mild brain injury/concussion. Information for families, coaches, educators, and community members is also available. Resources identify common symptoms of mild brain injury, discuss the effects of the injury on the client, and provide tips for healing.

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

PARTY is an interactive injury prevention and health promotion program for teens. Students learn about the path of an injury survivor from the injury through medical rehabilitation and community reintegration. Interactive sessions are provided by local emergency, enforcement, health, and other professionals involved in trauma situations.



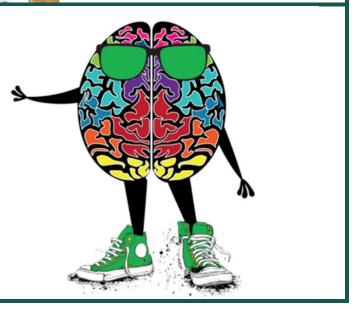
# <image>

#### **Brain Waves**

Brain Waves is an interactive half-day neuroscience presentation for students in grades 4-6. Students learn about different parts of the brain, basic neuroscience vocabulary, and how and why it is important to protect their brain and spinal cord. Information assists student awareness of the brain and the spinal cord, and provides simple injury prevention strategies.

#### Sask Smart

A program delivered through social media with a focus on injury prevention messaging such as: Buckle Up, Look First, Wear the Gear, Get Trained, Drive Sober, and Seek Help.



The three ABI Education and Prevention Coordinators also delivered resources/promotion material in a wide variety of topic areas to over 3,100 recipients.

Topic Area	# of Recipients
Fall Prevention	423
SaskSmart*	394
Impaired Driving Prevention	359
Snowmobile Safety	353
All Terrain Vehicle Safety	351
Traffic Safety	350
Stroke Prevention	350
General Injury Prevention	119
Brain Wave	110
PARTY	102
Grand Total	3,168

# The Ten Most Addressed Topic Areas in Resources/Promotion Material Delivered by Education and Prevention Coordinators, 2019-20

\* Delivered through Twitter and Facebook

## **COVID Service Innovations**

Virtual Modifications				Modified In Person Program Impro			mprovements		
	Social Media	Virtual Networking	Online Education	Mail	Drop offs	1:1	Outdoor Events	Electronic Resources	Quality Improvement
Program Area									
Central Education and Prevention	4	✓			~	4		~	*
South Education and Prevention	~	✓			4			4	✓
North Education and Prevention	4	✓	1	~	~	~	~	~	✓

A large proportion of the Education and Prevention Coordinators' injury prevention activity is targeted to children and youth and delivered in the K-12 school system. Due to public health restrictions in schools and communities, in-person service delivery moved to virtual platforms, with a focus on their SaskSmart social media campaign through Instagram, Facebook and Twitter, and presentations (PARTY, BrainWaves, ATV safety) and networking meetings through Zoom. Ensuring the continuity of ABI prevention messaging required a quick pivot to learn new programs, new marketing methods, online communication skills, and engagement tools (Canva, Google Classroom, Kahoot and Typeform).



<u>SaskSmart</u> involved regularly scheduled content on a variety of neuroscience, injury prevention and brain

health themes, like Distracted Driving, Farm Safety, Traumatic Brain Injury & Intimate Partner Violence,

Camping Safety, Cannabis & The Brain, Road Safety, Exercise & The Brain, Youth Workplace Safety, Motorcycle Safety, Men's Injury Prevention, Water Safety, Car Seats, Concussions, Addictions Awareness, Back To School Safety, and Falls Prevention. Over the past year, SaskSmart has been very successful, with:

- more than 19,600 social media engagements
- 648 Facebook followers (337.8% increase from April 2020)
- 137 Instagram followers (389.2% increase from April 2020), and
- 132 Twitter followers.

Educational contests have proven key in engaging and retaining SaskSmart followers this last year. There were 78 participant winners from across Saskatchewan (51 urban, 27 rural).

#### ABIIS Service Time Breakdown in 2020-21:

There was a 536% increase in Education and Prevention coordinators' ABIIS service hours recorded under research and resource development, from 240 hours in 2019-20, to over 1,525 hours in 2020-21. Service time was divided between 23 topic areas, with a primary focus on SaskSmart (280 additional hours were spent promoting the SaskSmart resources), General Injury Prevention, Mild Brain Injury, and Acquired Brain Injury.

## Child Injury Prevention Program - Service Description

The Saskatchewan Prevention Institute (SPI) is a provincial non-profit organization located in Saskatoon. Its Child Injury Prevention Program is funded to raise awareness and deliver education about the prevention of ABI in children.

The Child Injury Prevention Program focuses its interventions on the main causes of ABI among children as well as the evidence of what interventions are most effective in reducing these types of injuries.

The program's main areas of intervention include: general child injury prevention topics, bicycle safety, child passenger safety, farm safety, helmet safety, home safety, pedestrian safety, playground safety, Shaken Baby Syndrome/abusive head trauma, and ATV safety.



SPI strives to implement multifaceted strategies combining education, legislation, and engineering methods whenever possible in order to successfully reduce ABIs among children in Saskatchewan.

## Annual Program Utilization in 2019-20

#### Attendees at Coordinated and Delivered Events: 1,870

The Saskatchewan Presentation Institute delivered and/or coordinated events in 13 topic areas to over 1,800 attendees in 2019-20. The five most attended topic areas in 2019-20 were:

- General Injury Prevention (450 attendees)
- Farm Safety (400 attendees)
- Bicycle Safety (339 attendees)

- Child Passenger Safety (239 attendees)
- Home Safety (140 attendees)

## **COVID Service Innovations**

Virtual Modifications				Modified In Person		Program Improvements			
	Social Media	Virtual Networking	Online Education	Mail	Drop offs	1:1	Outdoor Events	Electronic Resources	Quality Improvement
Program Area									
SPI (Child Injury Prevention	~	4	~	✓	✓			✓	√

The Saskatchewan Prevention Institute's Child Injury Prevention Program was similarly required to pivot their programming to 100% virtual delivery using Zoom and Microsoft Teams. Education was delivered through platforms such as social media, the Saskatchewan Prevention Institute's website, webinars, and Google classroom. Some specific examples of their virtual service include:

- "Conversation with Experts" series on Risky Play, which was recorded and made available on their website
- Webinar on Child Development and Injury Prevention
- eResources informational recordings were made of bike, home, and pedestrian safety and delivered virtually
- Social media content development
- Professional development opportunity (7 modules/14 activities). Based on the Child Injury Prevention Programming and Action Guide, this free, virtual opportunity was targeted at health and safety professionals or anyone interested in childhood injury prevention, with activities and resources added monthly.
- Digital media campaign "Injury begins with You".

With the savings realized by reduced travel, the agency offered free shipping on resource requests.

#### ABIIS Service Time Breakdown in 2020-21:

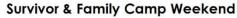
There was a substantial increase in service hours spent on coordinating education on injury prevention events (up 53%, or 880 hours, from over 580 hours in 2019-20) on topics such as: bicycle safety, risky play, poison prevention, ATV Safety, and concussions.

## Education and Support to Survivors and Families -Service Description

The Saskatchewan Brain Injury Association (SBIA) has staff in Moose Jaw, Saskatoon, and Regina. 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. This agency provides information, service advocacy, support, and guidance for ABI survivors and their families. Major activities include:

• Retreats held in Regina (Fall) and Saskatoon (Spring), and a 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 selfcare.

INDIANA JONESASK





Topped by Indiana Jones style hats, SBIA campers embarked on an adventure at SBIA camp on Arlington Beach.

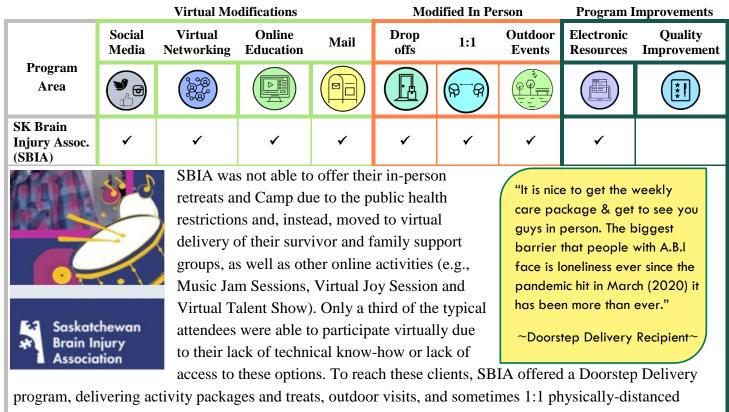
- A toll free telephone number is provided by SBIA for Saskatchewan residents to easily access support, information, and referral services. Inquiries may require basic information on ABI or direction to the appropriate service(s).
- SBIA provides educational materials, displays, and presentations in a variety of venues.

## Annual Program Utilization in 2019-20

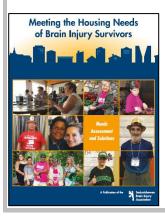
#### Support Events Delivered: 69 Attendees at Support Events: 1,064

The Saskatchewan Brain Injury Association delivered survivor/family support events to over 1,000 attendees in 2019-20. Activities highlights include over 800 attendees at camp and retreat events, and over 220 attendees at support groups.

## **COVID Service Innovations**



drumming sessions. In total, these virtual events and doorstop deliveries had over 4,150 attendees in 2020-21.



Other time was taken in resource development, with SBIA finalizing their housing report, *Meeting the Housing Needs of Brain Injury Survivors: Needs Assessment and Solutions*.

# Valuing the Unique Service Role and Impact of ABI Education and Prevention Programming:

The Education and Prevention Coordinators work with their community partners to address the high injury rates in Saskatchewan. Their injury prevention messaging and education has provincial reach in areas consistent with SGI's traffic safety priorities.

Through capacity building, resource development, research and evaluation, knowledge translation, and established service networks and partnerships, the Child Injury Prevention Program at SPI is committed to working with community organizations, governments, and other partners to ensure children are safe at home, on the road, and at play.

SBIA programs help ease some of the caregiving burden families of brain injury survivors disproportionately face. SBIA works with and supports survivors, starting from point of injury, and continuing on throughout their lives. It is funded to provide the only joint ABI survivor and family education and support delivered through three annual events. SBIA's events give ABI survivors a space where they feel understood and also help ease some of the caregiving

burden disproportionately faced by their families.

"It gives me a sense of belonging. It's nonjudgmental...because everyone here has a brain injury and that makes me calm".

~ABI Survivor~

# CONCLUSION

Through the ABI Partnership Project, a comprehensive, innovative and responsive continuum of community-based ABI services and resources are funded in Saskatchewan. High client service volumes and the province-wide delivery of education and prevention activities demonstrate the community need ABI services address.

Outcome measures show ABI clients are being assisted in achieving goals and improving levels of functional independence.

#### VALUING THE ABI PARTNERSHIP:

Over 26 years, SGI has made a sound investment in the ABI Partnership service infrastructure. ABI funded agencies have developed mature service networks, staffed with 865 years of collective ABI expertise. SGI sees a substantial return on investment in funding ABI injury prevention activities, and a cost benefit analysis demonstrates significant savings to the province of Saskatchewan in funding of Partnership services, overall.

ABI services are unique and hold additional value from a societal perspective. Service providers have emphatically stated that without access to them, ABI survivors, their families, and communities would experience diminished quality of life and opportunity. An increased risk of institutionalization and ill health from secondary health conditions would come at a real cost to the health sector as well as broader society.

MVC clients benefit from long standing service provision, and SGI provides a greater public good to Saskatchewan, by funding support services beneficial to ABI survivors of all injury causes.

#### ADAPTING SERVICE DURING COVID:

It has been said, 'necessity is the mother of invention', and this played out for both ABI funded agency staff and their clients as they quickly pivoted to remote work and virtual service provision during the COVID pandemic. Agency staff displayed remarkable ingenuity, flexibility, and compassion in adapting to a rapidly changed work environment, while clients and their families showed great resilience and fortitude in the face of the challenges it presented them.

Frequent phone check-ins offering education, support, and connection became the mainstay method of service support across ABI funded agencies. With travel almost completely curtailed, agency and client time and costs were reduced. Time gained from not travelling provided

ABI Partnership Project: 2019-21 Program Review

opportunities for more regular virtual service check-ins, which client/family feedback indicated helped them through the uncertainty and stress brought on by COVID-19. Not having to leave home during the pandemic was seen positively by many clients, as it offered safe and convenient alternatives to a variety of services (e.g., specialist medical appointments) traditionally delivered in-person and in-office. Adapting service activities to virtual formats also provided another means to reach a broader audience, as with the injury prevention e-Resources that were developed and delivered.

Virtual service is not a replacement for all in-person service. Many providers relayed that virtual service was not always optimal or available in instances such as when first meeting clients, or for clients lacking interest in or access to technology. It does, however, create more service choice. Emerging studies<sup>[39]</sup> show the benefits of virtual service, and the majority of ABI funded agencies expect to maintain some degree of virtual service beyond the pandemic. Having these additional options means service can be readily adapted if needed (e.g., extreme winter weather) or tailored to specific clients' needs – allowing greater flexibility, opportunity, and choice.

The critical need for the psychosocial supports that ABI funded agencies provide was amplified due to the challenges brought on by COVID-19. Without modified support (virtual, modified inperson), many survivors could have experienced far worse impacts. Wellness check-ins greatly assisted in maintaining the mental and physical health of survivors and their families throughout this stressful year. The service pivots, adaptations, and lessons learned through COVID-19 will help inform quality improvements to ABI programs in the years to come.

## References

- 1 Murray, C and A. Lopez. Global Health Statistics: A Compendium of Incidence, Prevalence and Mortality Estimates for over 200 Conditions. Cambridge: Harvard University Press; 1996.
- 2 Parachute and Injury Prevention Centre (2015). The Cost of Injury in Canada Summary Report: Analysis of Injury Trends 2004 and 2010. Parachute: Toronto, ON.
- 3 Lannin, N., et. al. An Australian Survey of the Clinical Practice Patterns of Case Management for Clients with Brain Injury. *Brain Impairment*, 2012;13: 228-237.
- Leith, K.H., L. Phillips, P.L. Sample. Exploring the service needs and experiences of persons with TBI and their families: the South Carolina experience. *Brain Injury*, 2004;18: 1191-1208.
- 5 Lefebvre, H., G. Cloutier, MJ. Levert. Perspectives of survivors of traumatic brain injury and their caregivers on long-term social integration. *Brain Injury*, 2008;22: 535-543.
- 6 Acquired Brain Injury Partnership Project: Program Guidelines, February 2007.
- 7 Brain Injury Canada, https://www.braininjurycanada.ca.
- 8 <u>http://www.traumaticbraininjury.com/symptoms-of-tbi/severe-tbi-symptoms/</u>
- Rosario, Emily R., et al. Patient navigation for traumatic brain injury promotes community re-integration and reduces re-hospitalizations. *Brain Injury*, 2017;31(10): 1340-1347.
- 10 Cantor, Joshua B., et al. Fatigue after traumatic brain injury and its impact on participation and quality of life. *Journal of Head Trauma Rehabilitation*, 2008;23(1): 41-51.
- Ponsford, Jennie, et al. Fatigue and sleep disturbance following traumatic brain injury Their nature, causes and potential treatments. *Journal of Head Trauma Rehabilitation*, 2012;27(3): 224-33.
- 12 <u>http://www.msktc.org/tbi/factsheets/Fatigue-And-Traumatic-Brain-Injury</u>
- Khan-Bourne, N. and R.G. Brown. Cognitive behaviour therapy for the treatment of depression in individuals with brain injury. Neuropsychological Rehabilitation, 2003;13 (1/2): 89-107.

- 14 Hick, A.J., et al. Behaviours of concern following moderate to severe traumatic brain injury in individuals living in the community. *Brain Injury*, 2017;31(10): 1312-1319.
- 15 Barker-Collo, Suzanne, et al. Treatment for depression following mild traumatic brain injury in adults: A meta-analysis. *Brain Injury*, 2013;27(10): 1124-1133.
- 16 Bombardier, Charles H., et al. Rates of Major Depressive Disorder and Clinical Outcomes Following Traumatic Brain Injury. *Journal of the American Medical Association*, 2010;303(19): 1938-1945.
- 17 Kreutzer, Jeffrey, et al. The prevalence and symptom rates of depression after traumatic brain injury: a comprehensive examination. *Brain Injury*, 2001;15(7): 563-576.
- Bombardier, C.H. & A. Turner (2009). Alcohol and traumatic disability in Frank, R. &
   T. Elliott, editors, *The Handbook of Rehabilitation Psychology, Second Edition*.
   Washington, DC: American Psychological Association Press, 241-258.
- 19 Bhalerao, Shree Uddhav, et al. Understanding the neuropsychiatric consequences associated with significant traumatic brain injury. *Brain Injury*, 2013;27(7-8): 767:774.
- 20 Lemsky, Carolyn and Tim Godden (2014). Acquired Brain Injury and Fetal Alcohol Spectrum Disorder: Implications for Treatment in *Fundamentals of Addiction, 4<sup>th</sup> edition: A Practical Guide for Counsellors.* Centre for Addictions and Mental Health (CAMH).
- 21 Bogner, J. et al. Integrating substance abuse treatment and vocational rehabilitation following traumatic brain injury. *J Head Trauma Rehabil*, 1997;12(5):57-71.
- 22 Kreutzer, Jeffrey, et al. Relationships following Neurological Conditions. *NeuroRehabilitation*, 2016;38(3): 271-279
- 23 Yasuda S., et al. Return to work for persons with traumatic brain injury. *Am J Phys Med Rehabil*, 2001;80(11): 852-64
- 24 <u>http://www.acnr.co.uk/2014/12/vocational-rehabilitation-following-traumatic-brain-injury-what-is-the-evidence-for-clinical-practice/.</u>
- 25 Topolovec-Vranic Jane, et al. Traumatic brain injury among people who are homeless: a systematic review. *BMC Public Health*, 2012;12: 1059
- 26 McIsaac, Kathryn E., et al. Association between traumatic brain injury and incarceration: a population-based cohort study. *CMAJ Open*, 2016; 4(4): E746-E753.
- 27 Brown, Jerrod and Jeff Louie. Traumatic-Brain Injury (TBI) and the Criminal Justice System: An Introduction to a Complex Topic. *Forensic Scholars Today*, 2016;2(2).

ABI Partnership Project: 2019-21 Program Review

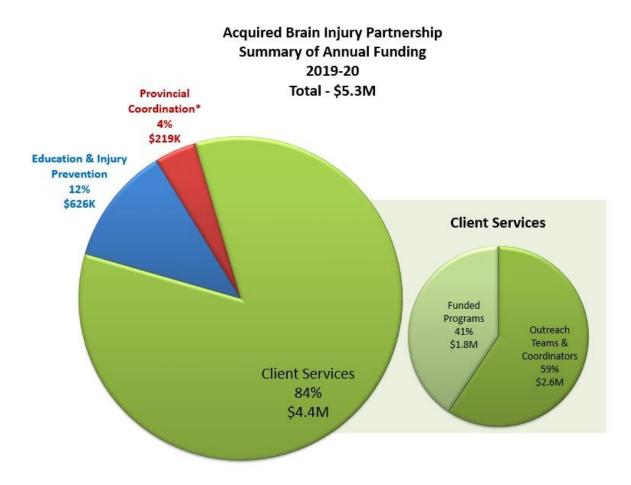
- 28 Acquired Brain Injury Working Group. Acquired Brain Injury: A Strategy for Services. Regina: Government of Saskatchewan; 1995.
- Parachute. *Potential Lost, Potential for Change: The Cost of Injury in Canada 2021.* Parachute: Toronto, ON. <u>Cost of Injury in Canada Parachute</u>.
- 30 Vogler J., A.M. Klein, A. Bender. Long-term health-related quality-of-life in patients with acquired brain injury and their caregivers. *Brain Injury*, 2014;28: 1381-1388.
- 31 Simpson, G. and K. Jones. How important is resilience among family members supporting relatives with traumatic brain injury or spinal cord injury? *Clinical Rehabilitation*, 2012;27: 367-377.
- 32 O'Callaghan A.M., L. McAllister, L. Wilson. Experiences of care: Perspectives of carers of adults with traumatic brain injury. *International Journal of Speech-Language Pathology*, 2011;13: 218-226.
- 33 Turner, B.J., et al. Perceived service and support needs during transition from hospital to home following acquired brain injury. *Disability and Rehabilitation*, 2011;33: 818-829.
- 34 McLean A.M., et al. 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.
- Altman I.M., et al. Effectiveness of community-based rehabilitation after traumatic brain injury for 489 program completers compared with those precipitously discharged.
   Archives of Physical Medicine and Rehabilitation, 2010;91(11): 1697-704.
- 36 Kim H. and A. Colantonio. Effectiveness of rehabilitation in enhancing community integration after acute traumatic brain injury: a systematic review. *American Journal of Occupational Therapy*, 2010;64(5): 709-19.
- 37 Brown, M., W.A. Gordon and L. Spielman. Participation in social and recreational activity in the community by individuals with traumatic brain injury. *Rehabilitation Psychology*, 2003;48: 266-74.
- Canadian Institute for Health Information (CIHI). National Trauma Registry: 2006 Injury Hospitalization Highlights Report. Ottawa.
   <u>https://secure.cihi.ca/free\_products/ntr\_highlights\_2006\_en.pdf</u>

- Ownsworth, Tamara. et al. Efficacy of Telerehabilitation for Adults With Traumatic
   Brain Injury: A Systematic Review. *Journal of Head Trauma Rehabilitation*, 2018-07;
   33(4): p.E33-46.
- 40 Douglas, M. et al. Evaluation of a 12-month lifestyle intervention by individuals with traumatic brain injury. *Rehabilitation Psychology*, 2019 Feb;64(1): 25-36.

## **APPENDIX A - Cost Benefit Methodology**

This cost benefit replicates the methodology used by Jon Schubert in his 2003 report.

The following chart illustrates the types and related costs of services provided through the ABI Partnership.



\*Includes Ministry of Health, Provincial Coordination, and Provincial Education and Prevention Coordination

The cost benefit uses direct client service events recorded in the ABI Partnership's information system, the Acquired Brain Injury Information System (ABIIS). The service hours recorded in ABIIS are direct services delivered to clients, and do not account for programs' total workload hours. The following is therefore an under accounting of the actual amount of time taken to deliver services.

The total service hours recorded in ABIIS were separated into injuries caused by motor vehicles and other causes in order to calculate the costs that SGI would pay for motor vehicle collision (MVC) customers if these services were provided outside of the ABI Partnership. The ABIIS "Community Groups" and "Consultations" service events do not include cause of injury

ABI Partnership Project: 2019-21 Program Review

information, thus a time estimate was used based on the proportion of MVC client registrations in the ABIIS in the time period being measured.

A service cost was calculated based on a rate of \$125/hour. This is an update to the rate used in Jon Schubert's 2003<sup>13</sup> report that accounts for inflation.<sup>14</sup>

	Total Client Hours	Total Family Hours	Client + Family Hours	Community Group Hours*	Consultation Hours *	Out-of-Town Travel Hours	GRAND TOTAL HOURS
Other Injury	38,808	39	38,847	696	677	2,514	42,734
Motor Vehicle	11,515	12	11,527	232	226	840	12,825
Grand Total	50,323	51	50,374	928	902	3,354	55,558

Value of the ABI Partnership's Delivered Services in 2019-20

Other Injury	4,855,875	\$87,000	\$84,625	\$314,250	\$5,341,750
Motor Vehicle	\$1,440,875	\$29,000	\$28,250	\$105,000	\$1,603,125
Grand Total	6,296,750	\$116,000	\$110,044	\$419,250	\$6,944,750

\*Community group and consultation service hours are not tracked by injury cause, so these hours were estimated based on the proportion of MVC clients registered in 2019-20.

Based on a comparative analysis of Outreach Team client files to events recorded in ABIIS in 2001, Jon Schubert Consulting found that there was an underreporting of service events by 50%. To compensate for underreporting an increase was applied to recorded service events of a range of 20% to 50% to estimate a more realistic total service time. The following charts estimate the total hours of service using these underreporting estimates.

<sup>&</sup>lt;sup>13</sup> Jon Schubert Consulting (2003). SGI's Investment in the Acquired Brain Injury Partnership Project: A Cost Benefit Analysis. Regina: Saskatchewan.

<sup>&</sup>lt;sup>14</sup> 2% compounded interest was applied over the last 18 years.

Total Service Hours/Year	12,825	
Assumptions		
ABIIS Under Reporting Minimum	20%	
ABIIS Under Reporting Maximum	50%	
Hourly Rate	\$125	
Cost of Providing Services for Motor Vehicle Inj	uries outside of the	
Partnership		
Motor Vehicle - Minimum	\$1,923,750	
Motor Vehicle - Maximum	\$2,404,688	

Cost of Providing Services for Motor Vehicle Injuries outside of the ABI Partnership

The estimated cost of providing services to motor vehicle injuries could be between \$1.9M and \$2.4M (as shown in the previous table). While this amount is less than the \$4.4M invested in the ABI Partnership for direct client service, there are a number of value-added factors that are difficult to fully quantify but demonstrate a multiplying effect from SGI's investment:

- Over the 26 years since the ABI Partnership began, a solid ABI service infrastructure has been established.
- 69 full-time equivalent (FTE) staff are presently funded to deliver service. Collectively, these organizations and their employees have **865 years of experience** working with ABI survivors and have amassed significant knowledge and expertise.
- Partnership programs have established service linkages throughout the province. In 2020-21, funded agencies reported working with **1,294** service partners. These service linkages would be lost without the ABI Partnership.
- Through their expertise and established service linkages, ABI funded agencies are able to **navigate a complex service system** and help clients access other needed services to assist them in their rehabilitation goals.
- Similar private service options do not exist in many parts of the province or at all.

#### Cost of Providing Services for <u>ALL Injuries</u> outside of the ABI Partnership

	The second
Service Hours/Year	55,558
Assumptions	
ABIIS Under Reporting Minimum	20%
ABIIS Under Reporting Maximum	50%
Hourly Rate	\$125
Cost of Providing Services for ALL	Injuries outside of the Partnership
All Injuries - Minimum	\$ 8,333,700
All Injuries - Maximum	\$10,417,125

• SGI investment in the ABI Partnership provides a greater 'public good' for survivors of ABI and their families. The services funded by the ABI Partnership would cost \$6.94M if purchased through private, fee-for-service arrangements. When accounting for underreporting of 20% to 50%, these services could cost between \$8.3M to \$10.4M to deliver. The ABI Partnership service continuum, as it is presently funded, results in a significant overall cost savings to the Province of Saskatchewan.

#### **Return on Investment for Injury Prevention Activities**

There are numerous studies that give return-on-investment ratios for different injury prevention programs. The following chart illustrates some of these figures and their sources.

Area	For every dollar spent, a savings of:	Source
Child Passenger Injury Prevention	\$14*	BC Injury Research and Prevention Unit. <sup>15</sup>
Booster Seats	\$71	Parachute
Bicycle Helmet	\$45	Parachute
Child Safety Seat	\$42	Parachute
Youth Substance Abuse Prevention Programs (an average of all programs listed by the Children's Safety Network)	\$16	Children's Safety Network (2014). Injury Prevention: What works. A summary of cost-outcome analyses for injury prevention programs (2014 update)
Average for these Initiatives:	\$38	

#### **Return on Investment for Injury Prevention Activities**

\*This is an average taken from a range of \$12 to \$16

The money spent on Education and Prevention programming was \$626K in 2020-21.

- Using the \$626K in funding for injury prevention programming, multiplied by the lowest return-on-investment (\$14) from the chart above yields a return-on-investment of **\$8.8M** to the Province of Saskatchewan, more than SGI's entire investment in the ABI Partnership.
- Using the average (\$38) from the chart above yields a return-on-investment of **\$23.8M** to the Province of Saskatchewan.

<sup>&</sup>lt;sup>15</sup> BC Injury Research and Prevention Unit. (March 2012). *Review of International Best-Practices for Improving Child Passenger Safety and Evaluation of Saskatchewan's Program*. Vancouver, BC.

• Much of the injury prevention programming delivered by ABI Partnership funded agencies touches on SGI priority areas (e.g., risky driving, bicycle safety, child passenger safety, pedestrian safety). Further, much of the general injury prevention programming also touches on road/vehicle safety issues; therefore much of this return on investment positively impacts SGI.

## **Appendix B - MPAI-4 Data Tables**

The improvement on the total inventory score and all three subscale scores were statistically significant (less than a 1% chance that any improvement seen is due to chance). This was true for staff ratings, ratings completed by the survivors' significant others, as well as ratings done by the survivors themselves. The following charts show the results of paired sample t-tests completed on packages where the anniversary or discharge were received this contract period.

<b>Staff Completed Inventories</b> Time 2 Inventory Completed between April 2019 and April 2021 (187 inventories)							
Subscale	oscale Intake Anniversary/Discharge T-test Result						
Ability	M=15.2.7,SD=8.9	M=9.7,SD=8.0	t(186)=13.8, p < .0001				
Adjustment	M=17.0,SD=8.8	M=11.3,SD=8.3	t(186)=12.1, p < .0001				
Participation	M=13.5,SD=6.7	M=9.2,SD=7.5	t(186)=13.4, p < .0001				
Total Score	M=40.3,SD=19.6	M=26.5,SD=19.6	t(651)=15.5, p < .0001				
		<b>Completed Inventories</b> ween April 2019 and April 2021	(91 inventories)				
Subscale	Intake	Anniversary/ Discharge	T-test Result				
Ability	M=14.1,SD=9.1	M=9.1;SD=7.9	t(91)=7.5, p < .0001				
Adjustment	M=15.4,SD=9.1	M=10.2,SD=8.4	t(90)=7.5, p < .0001				
Participation	M=10.4,SD=5.9	M=6.5,SD=5.9	t(87)=8.6, p < .0001				
Total Score	M=35.6,SD=18.8	M=23.0,SD=18.1 t(90)=8.6, p < .00					
		ther Completed Inventories tween April 2019 and April 2021					
Subscale	Intake	Anniversary/ Discharge	T-test Result				
Ability	M=19.5,SD=11.4	M=12.6,SD=8.3	t(24)=4.1, p < .001				
Adjustment	M=19.8,SD=9.8	M=14.6,SD=10.0	t(23)=3.1, p < .01				
Participation	M=14.4,SD=6.7	M=10.6,SD=6.9	t(22)=3.8, p < .001				
Total Score	M=48.4,SD=21.9	M=33.5,SD=20.9	t(22)=4.4, p < .001				