2022-2024

Program Review Acquired Brain Injury Partnership Project





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Executive Summary

OVERVIEW: The 2022-24 Acquired Brain Injury (ABI) Partnership Project (the ABI Partnership) Program Review summarizes ABI services delivered in the first two years of the 2022-25 contract. The Government of Saskatchewan supports the delivery of a broad range of community-based ABI programs. SGI provides global funding (currently \$5.42M annually) and the Ministry of Health provides ongoing project management support. Services span brain injury prevention to case and crisis management.

Program:

- Partners: SGI and Ministry of Health
- Partnership Founded: 1996
- Current Funding: 16.28M
- Funded Programs: 36 programs with 67.9 FTEs

Client Outcomes: Outcome measures show significant improvement after client involvement with ABI Programs:

- > 92% of client goals achieved; and
- 81% of clients experienced fewer challenges.

Partnerships: ABI programs are funded to augment currently available health services. In 2023-24, 2,706 service partners were reported with over 1,500 consultations.

Education & Prevention: Programs

focus on broadening public and professional understanding of brain injury:

- 12,880 attendees at Education and Prevention events delivered across Saskatchewan in 2023-24;
- \$2.6M Traffic Safety & Injury Prevention grants awarded to 273 communities since 1997.

Services:

- Served an average of 933 clients (197 MVC clients) in 2022-24;
- 588 new clients; 73 new MVC clients: 44,194 service hours delivered to clients and families in 171 communities

Value: Return on Investment (ROI) literature shows an expected \$37 of value for every \$1 spent on injury prevention. SGI's \$621K annual injury prevention programming investment translates into a \$23.0MROI. Cost-benefit analysis suggests that for the \$4.7MSGI invests annually in ABI clinical services, it would cost \$8.1M to buy these services on the private market.



The Acquired Brain Injury Partnership

The Acquired Brain Injury (ABI) Partnership Project (hereafter referred to as the "ABI Partnership") was established following the introduction of 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"^[5]. 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,
 - ➤ 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^[4].

The Current Report

This report summarizes service events and activities that occurred in 2022-23 and 2023-24, including:

- Direct service to ABI survivors, families, and other service providers
- Information provided about ABI and the ABI Partnership
- Injury Prevention events to a variety of audiences

Information Sources for This Report



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.





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 Funded Programs

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 67.97 direct service FTEs are funded by the ABI Partnership as reported at the end of the 2023-24 fiscal year, in addition to 1.0 FTE dedicated provincially to project management.

	Summary of the Programs Funded			
Funded Program Types	Description	Location of Program(s)*	Funded Positions	% 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	30.67	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	5.25	12%
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	6.2	7%

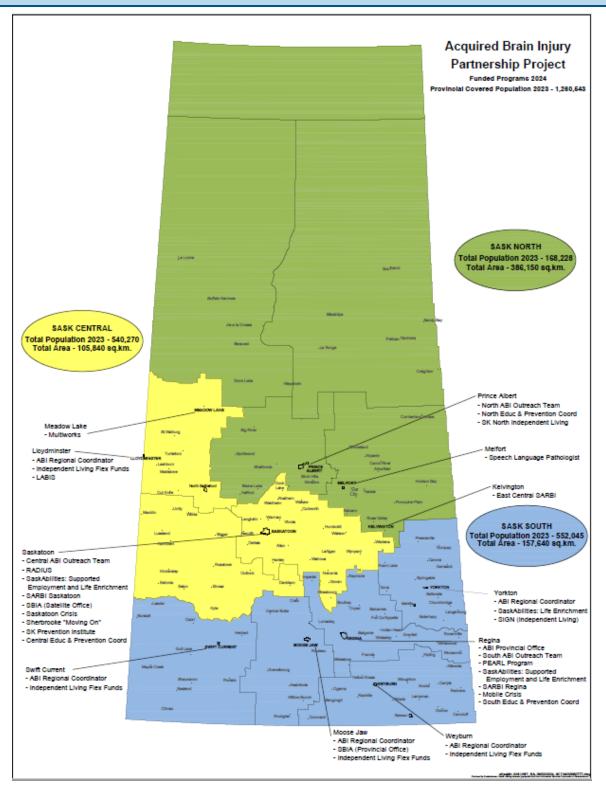
	Summary of the Programs Funded			
Funded Program Types	Description	Location of Program(s)*	Funded Positions	% of Total Funding
Independent Living and Residential	Services to help clients find appropriate housing & maintain independent living skills; includes rehab, recreation, a/vocational activities; transitional supportive apartments staffed 24/7; flex funds to contract as-needed individualized supports	PA, Regina, Yorkton	13.2	16%
Life Enrichment	Recreational & leisure programming to facilitate personal/social rehab for clients unable to return to the workforce; 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	2%
Vocational	 Support programs to aid clients in planning for, finding, and maintaining employment; services focus on: reducing barriers to employment work readiness & pre-employment support job development, matching, accommodation & coaching regular client/employer touchbase ABI education in the workplace 	Regina, Saskatoon, Meadow Lake	2.8	4%

Summary of the Programs Funded				
Funded Program Types	Description Location of Program(s)*		Funded Positions	% of Total Funding
Crisis	Resources for hard to serve clients; prioritize aggressive outreach and stabilization to ensure safety, follow up supports to reduce crisis behaviour, meet/maintain basic needs & improve functioning	Regina, Saskatoon	5.2	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);oversight of provincial ABI prevention/education activities, grants	Ministry of Health, Regina	1	2%
Total 68.97 100%				

*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 \$131.2M in total funding to date. In the current three-year contract period, which began April 1, 2022, and will end March 31, 2025, SGI has provided \$5.43M annually, for a three year total of \$16.28M.

Partner Investments

Over the 2022-23 and 2023-24 fiscal years, ABI funded agency partners reported an average annual investment of \$3.66M, augmenting SGI's annual funding by 67%. Agencies supplement SGI's funding in many ways, including:

 enhancing program activities and hours of service through other funding sources



- 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, training, and professional fees

SGI Plus Partner Investments

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

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

Contract	SGI Funding for the Contract	Annual SGI Funding	Annual In-Kind Funding	SGI Grant dollars
Period	Period	(average)	(average)	augmented by (%)
1996-1998	9.3M	3.1M	Not reported	
1999-2003 ¹	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%
2019-2021	16.11M	5.27M	3.57M	68%
Current Contract: 2022-2025	16.28M	5.46M	3.66M	68%

The table above illustrates the significant increase in partner investments over time (due in part to more thorough reporting).

RETURN ON INVESTMENT (ROI)

The only cure for Brain Injury is Prevention.

Since its inception, priority has always been given to funding education and prevention initiatives under the ABI Partnership service umbrella. Previous review of several injury prevention initiatives revealed an average ROI of 38:1². In 2023-24, the ABI Partnership provided \$621K in annual funding to support injury prevention and education activities. Using the average ROI above and multiplying its effect by \$621K in annual funding yields an ROI of \$22.9M for the province of Saskatchewan and SGI.

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

Every brain injury that is prevented results in significant, societal cost-savings. Because traumatic brain injuries (TBIs) tend to occur with a younger population in their early years of productive activity, the economic burden of lost productivity is far greater due to the long-

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

² For detail see Appendix A - Cost Benefit Methodology.

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.

As seen in the below tables, 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).

14000	Injury Prevention Events related to Traffic Safety, 2023-24	14600	Traffic Safety Related Resources Distributed, 2023-24
12000	Over 11,000 Attendees	14400	Over 14,000 Recipients Other Traffic Safety Topics Traffic Safety
	OtherTraffic Safety Topics ATV Safety Snownobile Safety	14200	PARTY Brain Wave
10000	Child Passenger Safety Brain Wave	13800	Bicycle Safety
8000	Brain Walk	13600	
6000	PARTY	13400	General Injury Prevention
4000		13000	
2000	Bicycle Safety	12800	SaskSmart
		12600	
0		12400	

COST BENEFIT

A cost benefit analysis³ updated with 2023-24 client service data determined that it would cost SGI an average of \$1.5M annually to purchase clinical services for its Motor Vehicle Collision (MVC) clients outside the ABI Partnership. It is impossible, however, to place a complete monetary value on the full benefit of ABI Partnership funded services as SGI's funding has enabled the creation of a unique service infrastructure that did not exist prior and would not SGI's funding has enabled a unique and mature ABI service infrastructure; staff with over 640 collective years of ABI expertise deliver services available across the province through committed funded agencies that augment SGI's investment.

exist without it. Collective but intangible benefits from this infrastructure include over 640 collective years of staff expertise in ABI, mature service networks, unique services across a

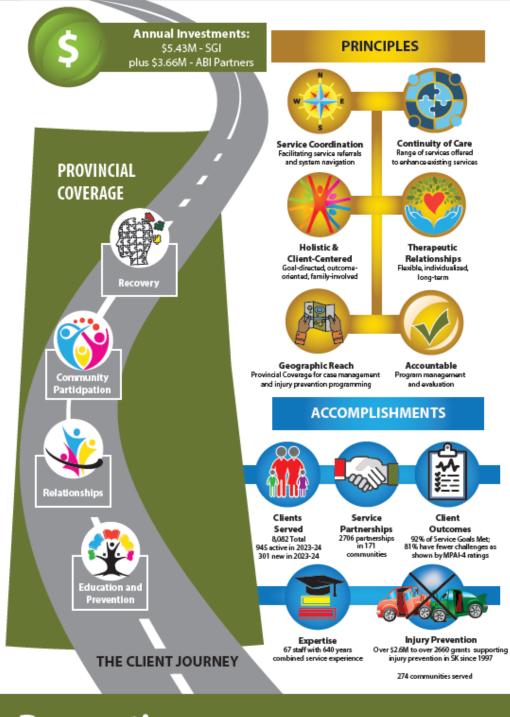


client's lifespan, and provincially available services that could not be purchased privately or would likely be offered piecemeal. ABI partner investments augment SGI's funding for ABI services by 67% annually and the overall cost to the Province of Saskatchewan to provide these ABI services would be approximately \$8.1M

annually - far exceeding SGI's \$4.7M annual investment in ABI clinical services. Together, SGI and ABI partner investments provide a broad-based public good by enabling service access to all survivors of ABI regardless of their injury cause and support comprehensive ABI services that effectively address the many and varied needs of ABI survivors, their families, and communities.

³ For detail see Appendix A.

Valuing Acquired Brain Injury Services



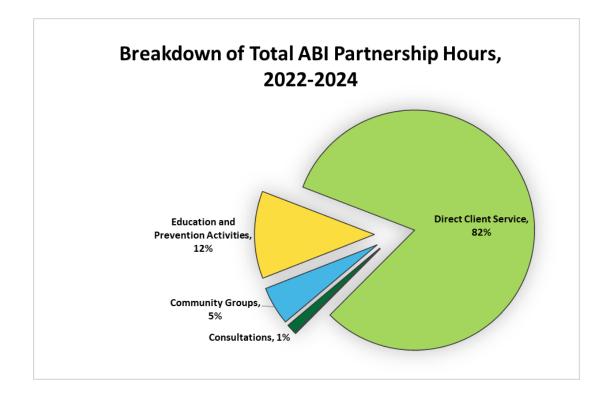
Prevention ... the only cure for brain injury.

Provincial Overview- All Services

ABI Partnership Delivered Services

Most service time this contract period was for direct client services with registered survivors, education and prevention activities and community groups⁴.

	Annual Average	% of Total
Type of Service	Service Hours	Recorded Time
Direct Client and Family Service	36,404	88%
Education and Prevention	5,246	12%
Community Groups	2,308	5%
Consultaions	611	1%
Total	44,573	44,573 hours



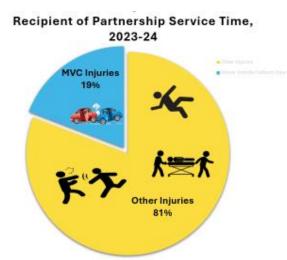
⁴ Community Group events include those services delivered to a group. These events are delivered to a wide variety of audiences – survivors, family, support groups, and health and other service providers.

Provincial Overview- Direct Client Services

Registered Clients

Over this contract cycle, an average of **933 clients** received service from an ABI Partnership funded program, including 197 clients who were injured in an MVC. There were **588 newly registered** or reactivated clients, 73 MVC clients. During 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, 2023-24



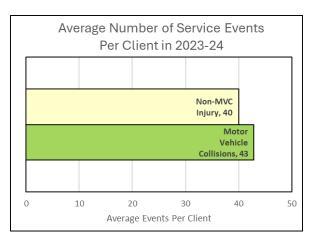
The five most common injury causes accounted for over two-thirds (81%) of **direct client service time**:

Stroke - 25%
 MVC- 19%
 Blow to Head - 16%
 Fall- 7%
 Tumour - 4%

Source: Acquired Brain Injury Information System

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

MVC clients make up almost a quarter of all individuals served through direct service programs (1,769 of 8,082 individuals) since 2000. On average, these clients have required a greater service duration than clients with other injury causes.



Source: Acquired Brain Injury Information System

Average Number of Years Receiving ABI Partnership Services by Cause of Injury and Status, as of March 31, 2024

Injury Cause	Inactive Clients	Active Clients	All Clients
Motor Vehicle/Motorcycle	3.8	9.3	4.2
All Other Injury Causes	2.4	5.1	2.6
Total Individuals	2.7	6.0	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.

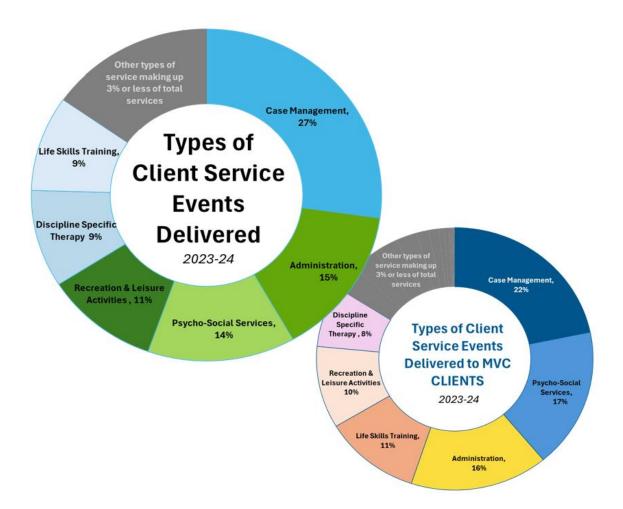
In addition to requiring service for a greater length of time, clients injured in MVCs typically require more service hours than clients injured by other causes. Over the course of their service involvement, MVC clients received an average of 190 hours of service versus 146 hours for clients injured in other ways.

This service pattern speaks to the long-term 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 publiclyfunded health system. Almost half of the ABI Partnership's clients in 2023-24 were registered with one of the ABI Outreach Teams (42.83%), a little over a quarter (35.93%) were registered with one or more funded programs, and 21.58% were registered with both.

In 2023-24, registered clients received a range of programming in 171 communities across the province. Case management comprised 27% of the services received by ABI survivors while the other 73% of services reflected a range of programming. This was true for clients of all injury causes, including MVC clients.





Service Coordination and Partnering

The majority of funded program⁵ service events occur with either the individual survivor (41%) or a group of survivors (31%). Case management programs coordinate services and help clients and families navigate a variety of programming, which requires working with clients, their supporters (such as family, schools, employers), and services to aid in survivors' optimal recovery.

Consultations

Services are coded as a "consultation" when funded agencies give information and advice to ABI survivors, their families, other funded programs, and/or health and other

⁵ Services with registered clients are recorded as direct client service.

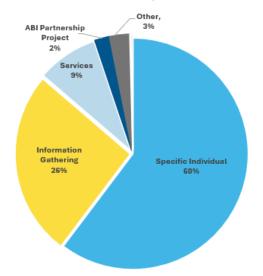
professionals of a more time-limited (ad hoc/one-off) nature. These service exchanges are not associated with registered clients⁶ but could be regarding a person in a funded program or a potential client.

The pie chart shows that most exchanges were for the purpose of discussing a specific individual, information gathering, or to ask generally about services.

Through consultation, ABI Partnership funded agencies show that they:

- 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; 24% of all consultations recorded during this contract period were with other ABI Partnership programs.

Consultation Purpose, 2023-24



Helping Others Navigate

- Almost a quarter of consultations (20%) resulted in a referral.
- In the 2022-25 contract period, ABI Partnership staff consulted with clients and families, service providers, and a variety of other people a total of 2,959 times.

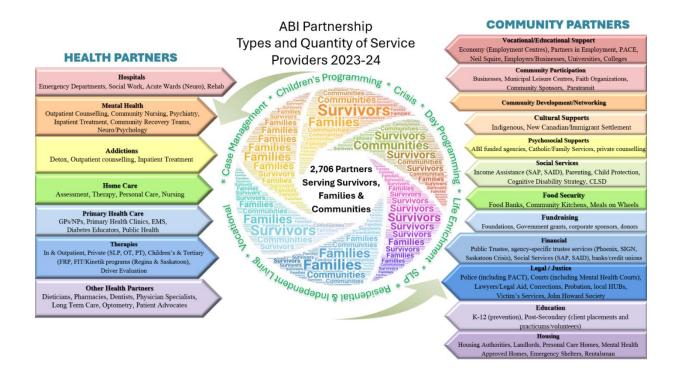
Client Referrals

Funded agencies referred their clients to over 25 different kinds of programming this contract period. Most referrals (66%) were made by a case management program. Of the referrals made during consultation events:

- 43% were to ABI Partnership programs (e.g. Outreach teams)
- 22% were to rehabilitation and other health services
- 35% were to a wide variety of other services

Reporting on Partnerships

The ABI Partnership was established to augment and not replace other health and human services. 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. In 2023-24, funded agencies reported working with 2,706 partners.





Client Outcomes

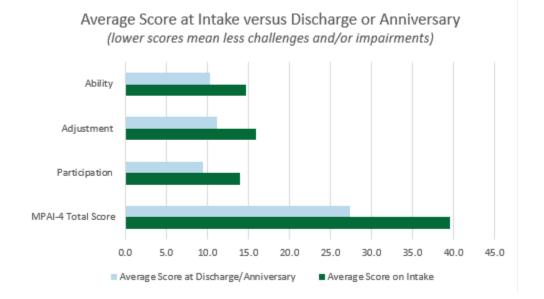
Functional Improvement

The Mayo Portland Adaptability Inventory (MPAI-4) is used by similar 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).

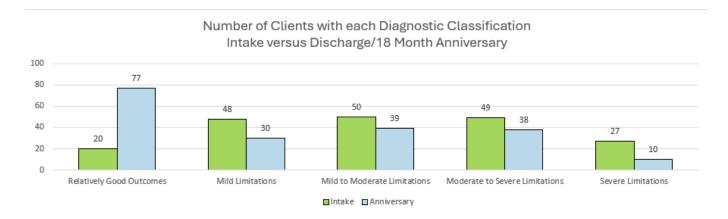
The MPAI-4 is used by every ABI Partnership Project funded program working with registered clients. Inventories are filled out after a client's intake to a program, and either at their 18-month anniversary or discharge from the program.

Since programs began using the MPAI-4 in 2007, complete packages have been received for 1,269 clients. During this contract period, intake and anniversary/discharge MPAI-4 results were received for 194 clients. The total scores and sub-scores for survivor rated, staff rated, and significant other rated inventories all showed statistically significant improvement between intake and anniversary/ discharge administration (lower scores mean less challenges and/or impairments).⁶



⁶ 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 majority (81%) of clients experienced fewer challenges and impairments**. In fact, over half of clients experienced such meaningful improvement that they received a less severe MPAI-4 diagnostic classification.



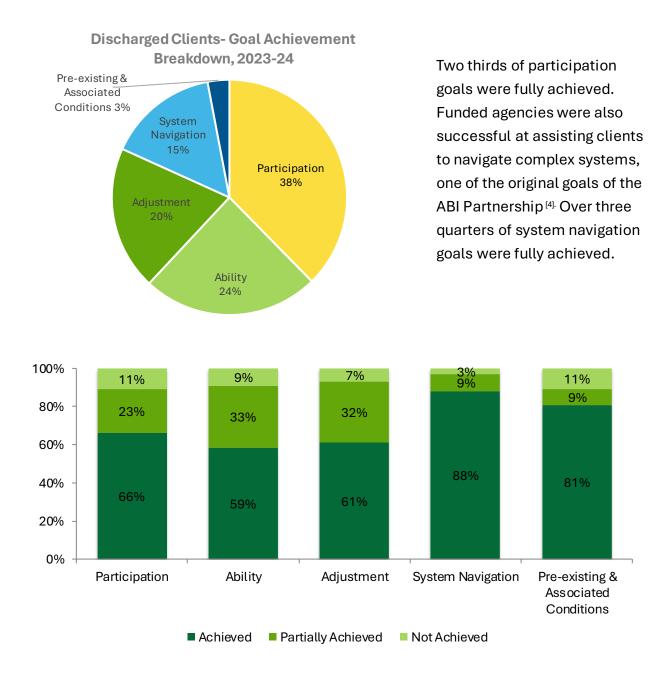
Goal Attainment

ABI Partnership staff work with clients to determine attainable goals to assist with re-integration back into community. Goal attainment data is one of the two provincial outcome tools used by funded programs since 2004.

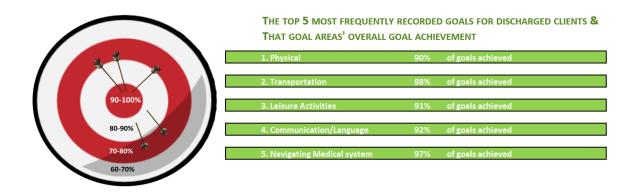
The ABI Partnership groups goals into five categories, four of which correspond to Mayo-Portland Adaptability Inventory (4th Edition) subscales.⁷ Over a third of goals for discharged clients this contract period were participation goals. The following provides a breakdown for clients discharged in 2022-23 and 2023-24:

- An average of 308
 clients are discharged
 each year.
- Clients work on an average of 7 goals with ABI Partnership staff.
- The top 10 most frequently achieved goals account for 40% of all goals.
- 92.7% of the goals reported by discharged clients were reported as fully achieved.

⁷ This excludes System Navigation goals which are tracked in the goal attainment reporting but are not part of the MPAI-4 items.



The high percentages of achievement showcase marked improvement after client involvement with ABI funded programs. Over half (55%) of recorded goals were in the following five areas, all with high levels of achievement (88%-97% partially to fully achieved).



Goals for Active Clients in 2023-24

Active client reporting shows goal achievement for clients still engaged in programming. Unlike for discharged clients, the goal attainment summaries for active clients include "in progress" as an achievement level. There were 5,909 goals recorded for 676 active clients in 2023-24, averaging nine goals per client. The majority of recorded goals were partially to fully achieved, with a quarter of goals still in progress.

Active Clients- Goal Achievement Breakdown, 2023-24

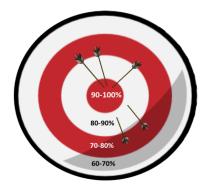
The five most frequently recorded "in progress" goals were:

- Employment
- Leisure Activities
- Physical
- Transportation
- Memory

The frequency of these goals may suggest these areas require more time to achieve.

The five most common goal areas for clients discharged this contract

period were also the most common for clients active in 2023-24. Over half (61%) of recorded goals were in the following five areas, all with high levels of achievement (86%-98% partially to fully achieved).



THE TOP **5** MOST FREQUENTLY RECORDED GOALS FOR ACTIVE CLIENTS & THAT GOAL AREAS' OVERALL GOAL ACHIEVEMENT

1. Leisure Activities	97 %	of goals achieved
2. Physical	96%	of goals achieved
3. Transportation	95%	of goals achieved
4. Navigating Medical system	98%	of goals achieved
5. Employment	86%	of goals achieved

Services for Families of ABI Survivors

Brain injury significantly impacts a survivor's entire family. Based on families'

unique needs and often long-term caregiving role^[6], 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 ^[1,7,8] – all areas that ABI funded agencies address on a regular basis. Funded agencies report providing families with:

- 293 community group events were offered to family and natural supports alone or with their family members.
- Family/Natural Supports of registered survivors were the sole recipients of 1,654 events, 978 as joint recipients with the survivor.

 Psychosocial support and education 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 to address their and their loved one's needs (medical, financial, education, employment).
- Respite support for families needing a break from their caregiving role.

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.

There were 3,116 services delivered to family and natural supports of survivors:

Service Events delivered to Family & Natural Supports, 2023-24	Number of Events	% of total Events Delivered to Family
Family of Registered Survivors	2,632	84%
Consultations	191	6%
Community Group	293	9%
Total Events	3,116	

Program Type Summaries- Direct Client

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, and most frequently reported service events in the ABI Information System (ABIIS).

Provincial Coordination		
Funded Programs: 1. Ministry of Health, Regina, Provincial Coordinator	Average Annual Funding: SGI Funding: \$106K % of Total Partnership Budget: 2% Partner Investment: \$215K 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 ABIIS and the ABI Partnership website.	

Value Add:
To ensure the service continuum remains responsive to client needs, the ABI Provincial Office formally reports
on ABI Partnership activities to SGI and the ABI Provincial Advisory Group. The ABI Provincial Advisory Group provides consultation and advice.

Case Management (CM)	
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	Average Annual Funding: SGI Funding: \$2.6 M % of Total Partnership Budget: 50% Partner Investment: \$1.6M Service Description: The ABI Outreach Teams in Prince Albert, Saskatoon, and Regina are responsible for CM services throughout the province while five Regional Coordinators deliver targeted local CM support. Both the Outreach Teams and Regional Coordinators work to bridge the gap in service between
 (Moose Jaw) 6. Prairie North ABI Coordinator (Lloydminster) 7. Sun Country ABI Coordinator (Weyburn) 8. Sunrise ABI Coordinator (Yorkton) 	 acute care/rehabilitation and the community. Key Metrics: 697 registered clients (76% of Partnership's total registrations) 40% of all Partnership service events 35% of CM time spent reviewing and assessing clients; 25% spent assisting with health/ financial system navigation. 76 communities served by Case Managers Value Add:

Service Linkages- providing transitional support from
acute care to community to assist with continuity of
care.
Geographic Reach - Outreach Teams serve three
broad geographic areas to provide service coverage
to the entire province; ABI Coordinators provide
additional support at the local community level.
Flexible Service- service individualized to address
need.
Recent research into system navigation supports for
ABI individuals speaks to the successful outcomes
achieved when clients have access to this service ^{[2],}
validating the Partnership's significant investment in
this type of service support.

Day Programming

Funded Programs:	Average Annual Funding:
 SARBI Saskatoon SARBI Regina East Central SARBI (Kelvington) LABIS (Lloydminster) Sherbrooke Community Center "Moving On" (Saskatoon) 	SGI Funding: \$388K % of Total Partnership Budget: 7% Partner Investment: \$388K Service Description: The goal of all day programs is to increase skills in the areas of communication, interpersonal relations, and community participation to enhance survivors' quality of life. Programs provide a safe, welcoming, inclusive, and structured environment where ABI survivors can work together on activities to reach their goals. Another critical feature of day programming is the family respite it provides, helping to reduce caregiver burden and stress.
	 Key Metrics: 75 registered clients (8% of Partnership's total registrations) 12% of all Partnership service events

 Top service events: psycho-social services (32%); discipline specific therapy (32%) 28% of referrals from ABI Outreach teams; 24% from survivor families.
Value Add: Social participation is an important means to enhance survivors' quality of life – a primary goal of the ABI Partnership. Studies show individuals with brain injuries who report greater participation in the community have improved outcomes in physical and cognitive abilities, adjustment, and quality of life ^[9, 10] .

Independent Living (IL) & Residential

Funded Programs:

- Sask North Independent Living (Prince Albert)
- Phoenix Residential Society, PEARL Program – Residential and Community Support (Regina)
- 3. SIGN (Yorkton)

Independent Living Flex Funds for:

- 1. former Sun Country RHA
- 2. former Cypress RHA
- 3. former Five Hills RHA
- 4. former Prairie North RHA

Average Annual Funding:

SGI Funding: \$846K % of Total Partnership Budget: 16% Partner Investment: \$187K

Service Description:

IL programs strive to improve community integration and quality of life by providing services such as: life skills, rehabilitation, recreational activities, and a/vocational support. Some programs work to increase stability of physical/ mental health, and many provide assistance with rehabilitation treatment plans. 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.

Key Metrics:

- 59 registered clients (6% of Partnership's total registrations)
- 29% of all Partnership service events

 Top service events: psycho-social services (31%), life skills training (16%), discipline specific therapy (11%) 19% of referrals from other healthcare professionals, 15% from ABI regional coordinators, 8% from ABI Outreach teams.
Value Add: Supporting clients to achieve independent living goals mitigates potential housing insecurity while enhancing life skills, increases independence and relieves caregiver burden for those living with family. For those able to live on their own, these supports reduce safety risks and maintain stability through regular staff check-ins and continued life skills support.

Life Enrichment (LE)	
Funded Programs:1. SaskAbilities (Saskatoon)2. SaskAbilities (Regina)	Average Annual Funding: SGI Funding: \$162K % of Total Partnership Budget: 3% Partner Investment: \$207K
3. SaskAbilities (Yorkton)	Service Description:
	ABI LE programs assist clients in making social, recreational, and leisure connections to the community, reducing social isolation, increasing
	community integration, and enhancing physical and mental health and overall quality of life.
	 Key Metrics: 59 registered clients (6% of Partnership's total registrations)
	 9% of all Partnership service events Top service events: recreation & leisure activities (35%); case management (23%).

 25% of referrals from the ABI Outreach teams, 25% from ABI regional coordinators.
Value Add:
Access to client-centered, community-based activities engages ABI survivors to develop meaningful peer relationships and to achieve a healthy lifestyle through support for their physical and mental health. By increasing community participation, programming reduces social isolation and loneliness, and aims to build independence and improve self-confidence. A secondary outcome is the family respite such programming provides.

Children's Programming	
Funded Program:	Average Annual Funding:
1. Radius (Saskatoon)	SGI Funding: \$119K % of Total Partnership Budget: 2% Partner Investment: \$20K
	Service Description:
	The goal of Radius' ABI Community Integration Program is to facilitate age-appropriate integration opportunities for children and youth with ABI in their own community. The core program strives to improve community participation by developing and implementing individual community integration plans, providing support to families, and linking participants to existing community resources.
	Key Metrics:
	 14 registered clients (2% of Partnership's total registrations) 1% of all Partnership service events Top service event: recreation & leisure activities (86%)

 57% of referrals from ABI Outreach teams, 21% from survivor families, 7% from other healthcare professionals
Value Add:
Radius is the only ABI program funded to provide dedicated support to children and youth. They have expanded age limits (to 29 years) in their Sports for Life program to respond to changing needs. They continue to address the unique informational and support needs of parents/families, and ensure staff receive training to enable culturally sensitive programming for Indigenous clients or newcomers to Canada.

Vocational	
Funded Programs:1. SaskAbilities (Saskatoon)2. SaskAbilities (Regina)3. Multiworks (Meadow	Average Annual Funding: SGI Funding: \$228K % of Total Partnership Budget: 4% Partner Investment: \$207K Service Description:
Lake)	The goal of ABI vocational programming is to improve the quality of life of survivors by increasing functional productivity and community integration. 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 with clients and/or their employers, and sharing information regarding ABI with employers and staff.
	 Key Metrics: 118 registered clients (13% of Partnership's total registrations)

 6% of all Partnership service events Top service events: life skills training (32%); vocational services (29%) 49% of referrals from ABI Outreach teams; 16% from other vocational/avocational services; 7% from client self-referrals.
Value Add: Evidence suggests specialist knowledge of both vocational rehabilitation and ABI is more likely to improve the chances of someone with ABI returning to work. Having dedicated vocational programs for ABI survivors to address their return to work goals increases the likelihood of successful employment outcomes ^{[3].}

Crisis	
 Funded Programs: 1. Saskatoon Crisis Intervention Services (Saskatoon) 2. Mobile Crisis (Regina) 	Average Annual Funding: SGI Funding: \$146K % of Total Partnership Budget: 3% Partner Investment: \$392KService Description:Crisis management programs are designed to serve those ABI survivors that are hard to serve, or difficult to manage. For these clients, mainstream services are unavailable or unsuccessful and so they experience chronic crisis and

 Key Metrics: 13 registered clients (1% of Partnership's total registrations) 3% of all Partnership service events Top service event: case management (97%) 38% of referrals from community services: 15% from ABI Outreach Teams, :15% from other healthcare professionals.
Value Add: 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 address 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) ⁸ .

⁸ United Way Saskatoon & Area, Publicly Funded Service Usage Data, 2017

Rehabilitation

Funded Programs:

 Speech Language Pathology (SLP) services (Melfort)

Average Annual Funding:

SGI Funding: \$51K % of Total Partnership Budget: 1% Partner Investment: \$115K

Service Description:

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.

Key Metrics:

- 27 registered clients (3% of Partnership's total registrations)
- 1% of all Partnership service events
- Top service event: discipline specific therapy (47%)
- 77% of referrals from other healthcare professionals

Value Add:

The program offers direct therapy (swallowing, speech, language, cognitive assessment) and is the only speechlanguage support for adult ABI survivors in the province. 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

Education and injury prevention programming has received dedicated funding from the ABI

Partnership for several years. There are five funded education and prevention programs that work to educate communities about brain injuries and 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. During this contract period, ABI Partnership funded programs works with 109 communities on injury prevention activities.

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

Education and Prevention Coordinators

Funded Programs:

- South Education and Prevention Coordinator (Regina)
- Central Education and Prevention Coordinator (Saskatoon)
- North Education and Prevention Coordinator (Prince Albert)
- 4. SK Prevention Institute -Child Injury Prevention
- 5. SK Brain Injury Association – Survivor and Family Education

Average Annual Funding:

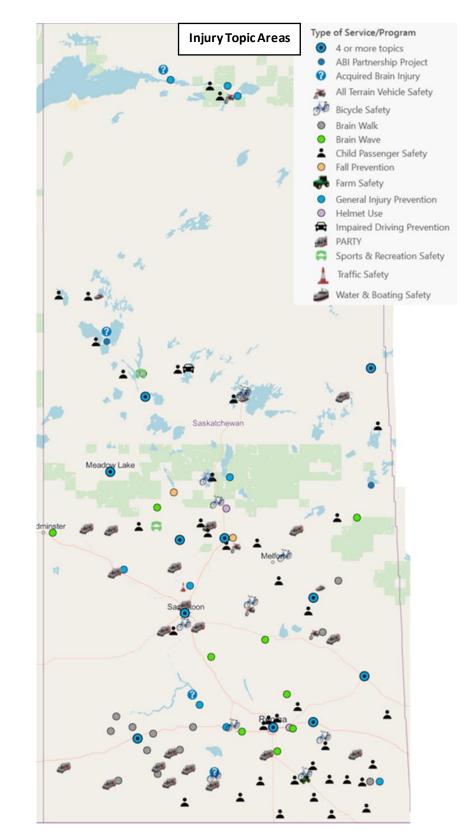
SGI Funding: \$552K % of Total Partnership Budget: 12% Partner Investment: \$365K

Service Description:

Three Regional Education and Prevention Coordinators support community-based injury prevention and brain injury education initiatives by: promoting the need for injury prevention and ABI education initiatives in communities; facilitating injury prevention programs (e.g., Brain Walk, PARTY); and distributing information and resources about the brain, brain injury, and injury prevention. SBIA is a membership-based, provincial non-profit organization that works with other community organizations to provide information, service advocacy, support, and guidance for

ABI survivors and their families. The SPI Child Injury		
Prevention Program focuses interventions on the main		
causes of ABI among children as well as evidence based		
interventions to reduce these types of injuries.		
Key Metrics:		
 9,155 attendees at Provincial EPC coordinated/ delivered events; 2,402 attendees at SPI coordinated events; and 1,323 attendees at SBIA coordinated events 13,470 recipients of EPC produced resources Injury prevention activities in 109 communities. 		
Value Add:		
Education and Prevention Coordinators work with community partners to address high injury rates in Saskatchewan, in areas consistent with SGI's traffic safety priorities. Through resource development, research, knowledge translation, and established service networks and partnerships, the Child Injury Prevention Program at SPI works to ensure children are safe. SBIA's events give ABI survivors a space where they feel understood and help ease some of the caregiving burden disproportionately faced by their families.		

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



Education and Prevention Activities by Location and Topic, 2023-24

Traffic Safety and Injury Prevention Community Grants

Since 1997, the Ministry of Health has cochaired and jointly funded the Traffic Safety and Injury Prevention Community Grant program in partnership with SGI, through the ABI Partnership Project.

The goal of the grant program is to enable community groups to establish, enhance, and deliver programs that address safety issues in their communities.

- To date, over \$2.6M has been awarded to Saskatchewan based organizations and over 2,660 projects have been funded
- 16 urban, 257 rural (including 20 First Nations) communities have received grants.
- In the current contract cycle, just over \$188K has been awarded to Saskatchewan based organizations with 120 projects being funded. Projects include a variety of injury prevention programs such as bicycle safety rodeos, PARTY, and drivers' safety presentations.



Conclusion

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

Outcome measures show programming assists ABI clients in achieving goals and improving levels of functional independence.

Valuing the ABI Partnership:

For almost 30 years, SGI has made a sound investment in the ABI Partnership service infrastructure. ABI funded agencies have developed mature service networks, staffed with 640 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 Saskatchewan in funding Partnership services.

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 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.

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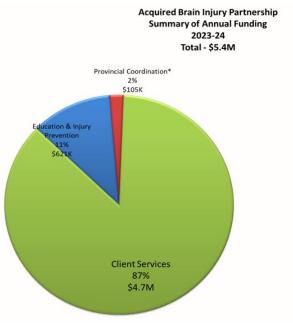
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APPENDIX A- Cost Benefit Methodology

This cost benefit analysis 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.

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 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 \$133/hour. This is an update to the rate used in Jon Schubert's 2003⁹ report that accounts for inflation.¹⁰

Value of the ABI Partnership's Delivered Services - Does not include education and prevention events -							
	Registered Client Total Hours Recorded in ABIIS	Family Total Hours Recorded in ABIIS*	Registered Client & Family Services Total Hours Recorded in ABIIS	Community Group Hours*	Consultation Hours re: non- registered clients*	Sum of Out-of-Town Travel Hours**	GRAND TOTAL HOURS
Other Injury	28,980	25	29,004	1,913	459	842	32,218
Motor Vehicle	6,879	6	6,885	468	112	101	7,566
Grand Total	35,859	31	35,889	2,381	571	943	39,785
Cost of Providing Services Outside of the Partnership based on an hourly rate of \$133							
Other Injury			\$3,857,582	\$254,451	\$61,021	\$111,990	\$4,285,044
Motor Vehicle			\$915,717	\$62,222	\$14,922	\$13,473	\$1,006,334
Grand Total	Grand Total \$4,773,299 \$316,673 \$75,943 \$125,463 \$5,291,378						\$5,291,378

Value of the ABI Partnership's Delivered Services in 2023-24

*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 2023-24.

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.

⁹ Jon Schubert Consulting (2003). SGI's Investment in the Acquired Brain Injury Partnership Project: A Cost Benefit Analysis. Regina: Saskatchewan.

¹⁰ 2% compounded interest was applied over the last 18 years.

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

Cost of Providing Services for Motor Vehicle Injuries outside of the Partnership between April 2023 and March 2024		
Total Service Hours 7,566		
Assumptions		
ABIIS Under Reporting Minimum	20%	
ABIIS Under Reporting Maximum	50%	
Hourly Rate	\$133	
Cost of Providing Services for Motor Vehicle Injuries outside of the Partnership		
Motor Vehicle - Minimum \$1,207,601		
Motor Vehicle - Maximum	\$1,509,501	

The estimated cost of providing services to motor vehicle injuries could be between \$1.2M and \$1.5M (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:

- Almost 30 years since the ABI Partnership began, a solid ABI service infrastructure has been established.
- 67 full-time equivalent (FTE) staff are presently funded to deliver service. Collectively, these organizations and their employees have **640 years of experience** working with ABI survivors and have amassed significant knowledge and expertise.
- Partnership programs have established service linkages throughout the province. In 2023-24, funded agencies reported working with **2,706** 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

otal Service Hours 39,785		
Assumptions	· · · · · · · · · · · · · · · · · · ·	
ABIIS Under Reporting Minimum	20%	
ABIIS Under Reporting Maximum	50%	
Hourly Rate	\$133	
Cost of Providing Services for ALL Injuries outside of the Partnership		
All Injuries - Minimum	\$6,349,654	
All Injuries - Maximum	\$7,937,068	

• 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 \$5.24M if purchased through private, fee-for-service arrangements. When

accounting for underreporting of 20% to 50%, these services **could cost between \$6.3M to \$7.9M 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
All-Terrain Vehicle Helmet Use	\$11	Children's Safety Network (2014). Injury Prevention: What works. A summary of cost-outcome analyses for injury prevention programs (2014 update)
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	<u>Children's Safety Network (2014).</u> Injury Prevention: What works. A summary of cost-outcome analyses for injury prevention programs (2014 update)
Average for these Initiatives:	\$37	

Return on Investment for Injury Prevention Activities

The money spent on Education and Prevention programming was \$621K in 2023-24.

- Using the \$621K in funding for injury prevention programming, multiplied by the lowest return-on-investment (\$11) from the chart above yields a return-on-investment of **\$6.8M** to the Province of Saskatchewan, more than SGI's entire investment in the ABI Partnership.
- Using the average (\$37) from the chart above yields a return-on-investment of **\$22.9M** to the Province of Saskatchewan.
- 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.

	Staff C	ompleted Inventories			
	Time 2 Inventory Completed between April 2022 and March 2024 (194 inventories)				
Subscale	Intake	Anniversary/ Discharge	T-test Result		
Ability	M = 14.55, SD = 8.24	M = 9.8, SD = 7.76	t(283) =14.57, p < 0.001		
Adjustment	M = 16.64, SD = 8.15	M = 11.4, SD = 8.35	t(283) =13.4, p < 0.001		
Participation	M = 13.44, SD = 7.19	M = 9.16, SD = 8.12	t(283) =14.6, p < 0.001		
Total Score	M = 39.3, SD = 18.41	M = 26.69, SD = 19.66	t(283) =16.55, p < 0.001		
	Survivor Completed Inventories				
Time 2 Inventory Completed between April 2022 and March 2024 (63 inventories)					
Subscale	Intake	Anniversary/ Discharge	T-test Result		
Ability	M = 14.75, SD = 7.72	M = 9.96, SD = 6.78	t(60) =5.38, p < 0.001		
Adjustment	M = 14.96, SD = 8.31	M = 9.55, SD = 9.55	t(60) =6.45, p < 0.001		
Participation	M = 12.03, SD = 6.3	M = 6.67, SD = 6.98	t(60) =8.07, p < 0.001		
Total Score	M = 37.44, SD = 17.13	M = 23.45, SD = 19.07	t(60) =7.8, p < 0.001		
Significant Other Completed Inventories					
Time 2 Inventory Completed between April 2022 and March 2024 (40 inventories)					
Subscale	Intake	Anniversary/ Discharge	T-test Result		
Ability	M = 18.05, SD = 8.38	M = 11.63, SD = 8.75	t(37) =5.17, p < 0.001		
Adjustment	M = 18.76, SD = 9.8	M = 12.02, SD = 10.44	t(37) =6.96, p < 0.001		
Participation	M = 13.05, SD = 6.36	M = 8.71, SD = 7.96	t(37) =6.12, p < 0.001		
Total Score	M = 44.78, SD = 19.07	M = 28.97, SD = 22.63	t(37) =7.1, p < 0.001		