

FINDINGS FROM: JANUARY 1, 2010 – DECEMBER 31, 2020

Prepared by: Laura Mills, Ph.D. (Q.M. Psych) Director, Research & Evaluation Jennifer Bingley, M.A., Research Associate

# **EXECUTIVE SUMMARY**

## About Pine River Institute

Pine River Institute (PRI) is a residential treatment program for youths 13-19 who struggle with addictive behaviours and often mental, behavioural, and relationship problems. These teens have a complex array of problems spanning criminality, stalled or abandoned school careers, and profound family dysfunction. When teens come to PRI they are angry, sad, and lost,

Parents of youth at PRI are desperate. They walk on eggshells to try to keep some peace, become frantic when their child leaves for days, and many have experienced their teen's suicidality, academic decline, and erratic behaviour. Despite all efforts, they have been unable to help.

At PRI, families find a safe, nurturing, professional environment where they begin to heal. Wilderness, residential, therapeutic, and academic programs converge to form our comprehensive treatment. This model enhances adolescents' maturity, meaning we develop emotion regulation, empathy, respectful relationships, a social ethic, and a future orientation. We help families find their way to attuned and supportive communication, healthy boundaries, and limit-setting.

PRI families move through four treatment PHASES. In Phase 1, the Outdoor Leadership Experience (OLE), youths spend several weeks in the wilderness developing physical and social skills and recognizing the need for change. They then move to RESIDENCE (Phase 2), an academic and therapeutic milieu. As they demonstrate greater levels of maturity, they move to TRANSITION (Phase 3), a time to practice their changes at home. AFTERCARE (Phase 4) is when the youths live at home and receive support to sustain treatment gains and integrate to the community and school or work.

Parents have a vital role in the therapeutic process and engage in a Parallel Process, where they experience growth and development alongside their child. We support parents as they courageously learn about themselves, relationships within their own families, and strategies to begin a new relationship with their child.

For 15 years, PRI has been evaluating the impact of this treatment. After PRI, most youths improve their mental, behavioural, and relationship health and successfully engage with school or work. Families function at new levels of acceptance, attunement, and communication. This evaluation report summarizes and details these changes.

PRI'S **Annual Evaluation Report** provides youth and family demographics; admissions and program engagement information; and treatment outcomes. This report is to foster quality improvement, and inform risk management, administration, organizational planning, and communications.

## **Snapshot of This Year's Evaluation**

After waiting about 1.3 years, over 30 youths enter PRI each year, and take about a year and a half to complete the program. All parents engage with the family program while their youth is at PRI.

In 2020, the average age at admission was 17, about 55% male. Half were from the GTA, others from non-GTA Ontario. Most youths had problematic substance use before they attended, which was reduced Post-PRI. The most common substances of choice were marijuana and alcohol. Before PRI, parents reported that their youths' academics were sporadic, stalled, or abandoned; post-PRI, youths re-engaged with school and report good grades and attendance.

Before PRI, most youths experienced clinically problematic mental health issues, often across multiple domains, most commonly anxiety, and/or depression. Mental health symptoms are significantly reduced after PRI. Hospital visits, police contact, and running away were also common before PRI and reduced significantly after the program.

Before admission, parents reported that about 3/4 of PRI youths had a history of suicidal thoughts in their lifetime: 37% had attempted to end his or her life. Suicidality is significantly reduced after PRI.

Family functioning improves from unhealthy before PRI to healthy after PRI, parents miss less work, and all family members indicate high satisfaction with treatment at PRI.

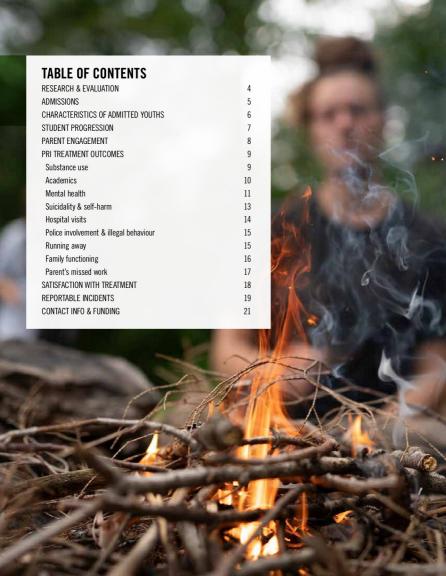


## PRI & The COVID-19 Pandemic

The pandemic forced PRI to make some major adjustments to our typical program structure. Sunday family group sessions were restructured to youth-only sessions, with the content for parents shifting to virtual weekly group sessions.

Our 3-day parent workshops were amended to one-day virtual events. All-community events such as meals became 'cohorted' and masks were the norm by early 2021. One of the biggest challenges was evident in the Transition Phase of the program – before COVID, youths would spend increasing amounts of time at home and engaging with their community while holding their bed at PRI. This was a chance for the family to gradually practice their new skills and tools. The structure of Transition has shifted with client need and government protocols but in all cases, the lack of peer and community engagement that was fundamental to Transition has been replaced with isolation.

We won't know the impact of these changes on youth outcomes for some years, and there are only a few noticeable COVID-related treatment process findings in this report. Over the next three years, however, we will explore the impact of the pandemic on youth outcomes, the PRI treatment process, and the severity of mental and behavioural symptoms of all applicants in the COVID era as compared to previous years.



# RESEARCH & EVALUATION

PRI Research is committed to research and evaluation to validate, understand, and inform treatment, and to contribute to the understanding of youth and family treatment

We are recognized as a Research Designated Program by the National Association of Therapeutic Schools and Programs and serve on their Ethics Board and Vice Chair of their Research Committee.

We have developed several partnerships to increase our capacity to share knowledge about youth and family treatment, Our current partners include Dr. Debra Pepler. Distinguished Research Professor of Psychology at York University: Dr. Amanda Uliaszek (University of Toronto [UofT]): Dr. Jennifer Eastabrook (Trent University): Dr. Nevin Harper (University of Victoria), Dr. Todd Cunningham (Ontario Institute for Studies in Education), and the internship offices of U of T's Factor-Inwentash Faculty of Social Work and Adler Graduate Professional School. Research Projects planned for 2021 include:

- Who are the applicants who don't attend PRI and what happens to them?
- How do Learning Disabilities play a part in youth treatment and outcomes?
- Is emotional intelligence related to mental health and behaviour outcomes?
- . When family functioning improves in treatment, are youth outcomes optimized?
- What are the benefits of the Wilderness Phase of PRI?

To advise and monitor our research activities, PRI's Board of Directors has a Research Advisory Committee under the leadership of Dr. Debra Pepler, Members include Claire Fainer, Dr. Fave Mishna, Dr. Mark Greenberg, Dr. Leena Augimeri, Dr. Gillian Mulvale, Dr. Evangeline Danseco.

Treatment Changes occur often in a dynamic therapeutic milieu, and many treatment elements are not tracked for evaluation. For example, a new activity may have an impact on youth experience, but we aren't able to identify if these types of things are triggers for changes in health. We can only say that, in general, the experience at PRI is associated with the outcomes presented here.

Treatment Completion. Full program completion at PRI is recognized by graduation from Aftercare. Aftercare, however, varies across families, so for evaluation, completers are defined as students who completed the Transition out of the residential phase of the program. You will see results for 'completers' (Cs) - youths who completed Transition, and 'partial-completers' (PCs) - youths who departed before completing Transition. When the differences between Cs and PCs are statistically significant, they are noted with a star\*.

Response Rate. At least one parent of the 89% of families who completed PRI (53% among partial completers) after departure: 35% of youths completed our post-treatment surveys. We typically report health and behaviour based on parent surveys in this report, with supplemental information from youths. With 31 clients per year, we cannot generalize our outcomes to other youths: alumni families who we aren't able to reach might have different experiences than those represented in this report.

Time Anchor: Respondents are asked to reflect on the most recent three months before their survey.

# **ADMISSIONS**



### ADMISSIONS DETAILS

Each year family members and professionals contact PRI regarding a youth struggling with addictive behaviour and often mental health and behavioural problems. Inquirers complete our application, submit medical and academic documents, and, if appropriate, are placed on our admission wait list.

Families complete a comprehensive assessment a few weeks before admission and are admitted when a bed becomes available. Over the past 11 years, an average of 32 youths entered PRI for treatment every year. In 2020, out of 205 completed applications, 32 youths were admitted to the program. Sometimes, youths return to PRI for treatment re-entry, but there were no-re-entrants in the past 3 years. However, a youth may return to OLE for a few weeks of 're-grounding'. In 2020, there was one re-grounding and in 2019, there were 3 such cases, but none in 2018.

The average wait time in the past five years was 478 days for Ministry of Health and Long-Term Care (MOH) clients and in 2020 was **455** days<sup>1</sup>. Clients funded by MOH wait longer than those who pay privately, who, in 2020, waited an average of **156** days<sup>2</sup>. The wait for a private pay bed is based on days between first contact and entry. Once a family formally decides to pay privately, the wait is about three weeks. Average wait times are shown below, by year and type of pay (Table 1).

Table 1. Average days from Contact to Admission by Year and Type of Pay 2016-2020

20	16	20	17	20	118	20	119	20	20
MOH (18)	PRIV (5)	MOH (22)	PRIV (9)	MOH (18)	PRIV (17)	MOH (17)	PRIV (11)	MOH (26)	PRIV (6)
462	287	561	130	511	109	391	124	455	156

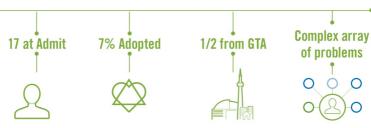
Note: Some wait time durations from previous years were corrected and will not align with previous reports.

Over 90% of inquiries are made by a parent, the rest are from other family members, professionals, or the youths themselves. Inquirers hear about PRI from various sources: about a quarter find us online, about a quarter from a professional or medical doctor; others from PRI alumni, media and communication activities, education consultants, and through friends and family.

<sup>&</sup>lt;sup>1</sup> Wait times were not different based on year of entry (F(4,137) =.62, p=.65, 2=.02) <sup>2</sup> Private Pay clients wait fewer days than MOH clients (F(146)=66.8, p<.001, 2=.33).



# CHARACTERISTICS OF ADMITTED YOUTHS



Demographics. The average age of youth at admission is 17.8. About 56% of PRI youths' biological parents are married (to each other); almost 2% of PRI youths have experienced the death of a parent. An average of 7% of PRI youths are adopted. About half of PRI youth are from the GTA, most others are from elsewhere in Ontario. The ratio of male to female since 2010 is approximately 2:1. but in the last three years (since we increased female client capacity) was about 55% male, 40-42% female, and 3% transgender.

Health Profile. PRI youths experience addictive behaviour as a part of their complex profile, including over-utilization of devices. PRI youths are typically not gamblers. Concurrent with addictive behaviour, PRI youths typically have experience with one or more mental health or **learning** challenges. About three quarters of PRI youths have experience with suicidality: one in three had made an attempt to end his or her life before attending PRI. About a third of PRI parents indicate their child has a history of self-harm (e.g., cutting, burning, removing skin, and banging against walls)3, often to cope with intense emotional distress4. About two-thirds of PRI youths have experienced previous treatment of various types and many have been **hospitalized** for reasons of safety, assessment, or stabilization. Running away from home and contact with police is also common, and typically experienced by about half to two-thirds of our youths before PRI.

Please note that the data regarding such personal experience as suicidality and self-harm may be underrepresented as they are gathered during the admissions process, before youth and parents have developed a relationship with the clinical team at PRI, when respondents may not feel comfortable disclosing such information.

Aichardson, C. et al. (2012). The truth about self-harm: For young people and their friends and families [Brochure]. London, U.K.: Mental Health Foundation.

# STUDENT PROGRESSION

1.5 YEARS TO COMPLETE



## DETAILS ON STUDENT ENGAGEMENT

Treatment completion is known to foster healthy outcomes; therefore, we strive to help our youths reach Transition completion. The figure below details our completion rates for the last five years. In some cases, youths exit the program before completion, based on a mutual client-clinician decision or for medical reasons which cannot be addressed at PRI. In 2020, there were 4 youths discharged based on a clinician-endorsed 'planned early discharge'. These types of departures are shown as 'Medical / Mutual' in Figure 1.

Figure 1. Phase at Departure by Year of Departure, in Percentages, 2016-2020



The average length of stay for youth who completed the program in 2020 was **564** days. Table 2 details length of stay by year of departure and PRI Completion for the last five years.

Table 2. Average Length of Stay in Days by Year of Departure and PRI Completion 2016-2020<sup>5</sup>

	2016 (N=22)	2017 (N=33)	2018 (N=30)	2019 (N=32)	2020 (N=30)
Completers* 6	568	552	520	559	564
Partial- completers	341	310	169	316	230

<sup>\*</sup> This blue star means there is a statistically significant difference, here, in the number of days in program between completers and partial-completers

## Aftercare

When youths complete Transition they are encouraged to participate in Aftercare, a fee-for-service option (a grant from Royal Bank of Canada partially funds this program). Over the last five years, 90% of our treatment completers engaged with Aftercare.

<sup>&</sup>lt;sup>5</sup> Length of stay was not different based on year of departure.

<sup>&</sup>lt;sup>6</sup> Completers stay longer than partial-completers across all five years. (F(4,137)=120.92, p<.001, 2=.47

# PARENT ENGAGEMENT



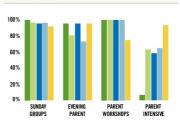
## DETAILS ABOUT PARENT ENGAGEMENT

Parent engagement is core to the program. Once a youth has progressed from OLE to the residence, PRI parents/guardians participate in family therapy. Before March 2020, this entailed a family group session every other Sunday, bi-weekly evening parent groups, one parent-only intensive two-day therapeutic process group, and two two-day parent workshops per year. The pandemic forced some changes to the structure of our family work. The learning content of Sunday sessions was shifted to the evening parent-only groups, which were offered virtually. Two-day onsite parent workshops became one-day virtual events. Intensives were cancelled for the most part. with tentative re-uptake late in 2021.

Figure 2 shows the parental attendance for the last five years, for families who progressed further than Stage 1 (OLE) for Sundays and Parent Groups and those who progressed at least to Transition (Stage 4) for Retreats & Workshops. The impact of the pandemic is subtle here, as these figures are based on year of departure, and as such, many families who departed in 2020 had a chance to attend at least one of each of the family events. We can see, however, a decline in parent workshops, optimal attendance at evening groups, and increase in attendance at parent intensives.

The family member who engages in parallel work is most often a parent, but in some cases can be a grandparent or other adult guardian. An average of 1.7 family members is involved at each opportunity.

Figure 2. Attendance at Parent Opportunities by Year of Departure (2016-2020)



■ 2016 (N=22) ■ 2017 (N=32) ■ 2018 (N=23) ■ 2019 (N=30) ■ 2020 (N=23)

# PRI TREATMENT OUTCOMES

## Substance use

# polysubstance use

started using age

**58**% BEFORE → AFTE BEFORE PRI

12%
USING DAILY
AFTER PRI

To measure substance use, we use the Drug History Questionnaire (DHQ)<sup>7</sup>, which asks about the frequency and age of onset for 14 types of substances. Before PRI, parents indicated that youths started using substances at an average age of 13.8 (youths indicate they started using at age 12.7). Before PRI, almost two-thirds of parents (58%) reported that their child used substances daily, only 10% indicated no recent substance use. Most youths had tried several types of drugs; parents estimate their child uses three types of drugs; youths indicate they use five. The most common youth substance of choice as reported by parents was marijuana (73%), then alcohol (7%).

Table 3. Parent-Reported Substance Use Pre- & Post-PRI by Time and PRI Completion

	Pre-PRI	3M Po	st-PRI	6M Po	6M Post-PRI		1Y Post-PRI		2Y Post-PRI	
	(N=149)	C (N=32)	PC (N=14)	C (N=44)	PC (N=17)	C (N=50)	PC (N=14)	C (N=41)	PC (N=9)	
Daily Use	58%	0%	43%	14%	29%	12%	36%	20%	22%	
1-6 Days per Week	13%	25%	21%	43%	24%	46%	29%	49%	44%	
1x Per Month or Less	15%	41%	21%	23%	18%	24%	14%	10%	0%	
None in Last 3 Months	10%	34%	14%	20%	29%	18%	21%	22%	33%	

## **Academics**



Among Ontario's Grade 9 & 10, about 75% of Academiclevel students and about half of Applied-level students earn A's and B's, About 80% of PRI youths were A and B earners in grades 3 and 6 but by grade nine over half were earning C's and D's. By grade 11, one in five was failing. We asked parents about the most recent mark for their child before and after the program. The results are below, for parents who indicated their child was in school. The proportion of youths earning As and Bs increases after PRI, and the proportion earning Cs, Ds, or failing decreases.

Table 4. Parent-Reported Recent Marks for Youths who were in School

PRE-PRI (N=97)	As 8	& Bs	Cs	& Ds	Failing	
ric-rici(N=37)	27%		52%		21%	
3-6M POST-PRI (N=77)	Cs	PCs	Cs	PCs	Cs	PCs
1-2Y POST-PRI (N=52)	80%	58%	20%	38%	0%	4%
1-21 1 031-1 KI (N=32)	82%	54%	18%	31%	0%	18%

Before PRI, many (37%) youths who should be in school are not. At 3-4M Post-PRI. 92% of youths who completed PRI and whose parents say they should be in school are in school (for Partial Completers, 82%). At 1-2Y Post-PRI, 89% of youths who completed PRI and whose parents say they should be in school are in school (for PCs, 72%).

Among those who should be in school, parents reported that their child missed an average of 28 days in the most recent three months. Given that there are on average 60 school days in three months, that represents missing 47% of school days. After PRI, at 3-6M Post-Treatment, those who complete PRI averaged about 4 missed school days every three months (7% of 60 days) and those who partially complete tend to miss about 10 (17% of 60 days). At 1-2Y Post-PRI, completers miss 0 days, partial completers miss 8 (13% of 60 days).

About 36% of Canadians aged 21 were at a University in 2015-16 (Statistics Canada). On average, youths who are 3-4Y post-discharge should be at least 21. At this timepoint, 56% of PRI parents report their youths were in or graduated from Post Secondary school and another 27% had graduated high school but had not pursued postsecondary education at that point.

Most<sup>8</sup> (88%) PRI youths had been diagnosed with attention deficits (ADD/ADHD) and/or a learning disability (LD) prior to admission. Specifically, 26% of PRI admitted youths have an LD, 32% have ADD/ADHD, and an additional 30% have both an LD and ADD/ADHD. Four percent (4%) of parents indicate no learning or ADD/ADHD issues and 8% of cases are unclear or unknown. The most common type of LD is combined (e.g., memory and communication deficits). Some of our youths have never had psycho-educational testing, and as such these figures may be underestimated.

Previous years' LD data were underestimated. In 2020, we examined case files and psycho-educational reports for every PRI client to better understand the learning profile of our youths.

## Mental health

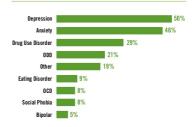


### MENTAL HEALTH DETAILS

Diagnoses. Understanding mental health is challenging, since many youths meet the criteria but have no formal diagnosis. Barriers to diagnoses include youths whose doctor will not diagnose due to substance use or age, refusal to see doctors, and the use of prescribed medication for mental health issues without a formal diagnosis. As such, mental health issues among applicants are likely underestimated.

Between 2010 and 2020, 248 parents (73% of a total 348 youth admissions) reported their child's formally diagnosed mental health disorder (not including ADD/ADHD)³. Of those with a diagnosis, 23% were diagnosed with one disorder, 21% were diagnosed with two, 19% with three and 17% with four, 10% with five, and 9% with six or seven diagnoses. The most common diagnoses were anxiety and depression (Figure 3).

Figure 3. Parent-Reported Youth Mental Health Diagnoses at Application (2010 – 2020)



Note: Drug Use Disorder % represent youths who have a formal diagnosis. Most PRI youths would qualify for this before PRI but may be undiagnosed.

Note: 5% or less of parents report their child as having Panic Disorder (4%), PTSD (3%), Conduct Disorder (2%), Tourette's Syndrome (1%), Schizophrenia (1%) and other diagnoses such as ASD/PDD-NOS (3%), and a personality disorder (4%).

<sup>&</sup>lt;sup>9</sup> Even though we specify 'physician diagnoses', some parents might report a disorder without formal diagnosis.

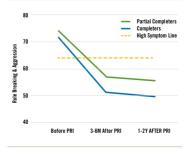
Mental Health Functioning & Treatment Impact. We use the Achenbach System of Empirically Based Assessment (ASEBA) to understand our impact on mental health and behaviour. On the ASEBA, scores 64 and over indicate Clinically Problematic Functioning<sup>10</sup>. Reduced scores indicate improvements in health. Figure 4 shows parent report scores that indicate, on average, youths enter PRI with clinically problematic anxiety & depression symptoms. These symptoms reduce to healthy levels after PRI and these improvements are maintained for 1-2 years post-program. This improvement over time is significant<sup>11</sup> regardless of whether youths complete the program. Completers and partial completers do not change differently over time to a statistically significant degree12. Youth reports generally agree with parent reports - clinically problematic functioning before the program and improvements soon after the program that are sustained over time.

Figure 4. Parent-Reported Mental Health Symptoms Before & After PRI by Treatment Completion



Behavioural Functioning & Treatment Impact. The ASEBA assesses behavioural functioning by measuring rule-breaking and aggression. Scores 64 and over indicate Clinically Problematic Functioning<sup>10</sup>, Reduced scores indicate improvements. Figure 5 shows parent report scores that indicate, on average, youths enter PRI with clinically problematic rule-breaking & aggression. These symptoms reduce to healthy levels after PRI and these improvements are maintained for 1-2 years post-program. This improvement over time is significant<sup>13</sup> whether or not youths complete the program. Completers and partial completers do not change differently over time to a statistically significant degree14. Youth reports generally agree with parent reports – clinically problematic functioning before the program, and improvements soon after the program that are sustained over time.

Figure 5. Parent-Reported Behaviour Symptoms Before & After PRI by Treatment Completion



<sup>10</sup> Achenbach, T. M., & Rescorla, L. A. (2001), Manual for the ASEBA School-Age Forms & Profiles, Burlington, VT; University of Vermont, Research Center for Children, Youths, & Families,

<sup>&</sup>lt;sup>11</sup>Change over time is significant (F(54) = 79.7, p < .001, with large effect size 2 = .60)

 $<sup>^{12}</sup>$ Groups do not change differently over time (F(52) = 1.6, p = .22, 2 = .03)

<sup>&</sup>lt;sup>13</sup>Change over time is significant (F(53) = 108.6, p < .001, with large effect size 2 = .67)

 $<sup>^{14}</sup>$ Groups do not change differently over time (F(52) = , p = .37, 2 = .02)

# Suicidality & self-harm



## SUICIDALITY & SELF-HARM DETAILS

Statistics Canada reports that in 2015 14 males and 6 females for every 100,000 15-24 year-olds had committed suicide. With an estimated 20 attempts for every completed event, it is thus estimated that 0.4 young people attempt suicide each year. For applicants to PRI, however, suicidality is more common.

Parents report that before PRI, 46% of youth had suicidal thoughts in the most recent 3 months (83% at some time in the child's life), 15% had made a suicidal plan (41% at some point in life), and in the most recent 3 months 11% (37% at some point in life) had made an attempt to end his or her life. The frequency of suicidality is reduced after PRI (Table 5).

Non-suicidal self-harm is also common among PRI applicants. One third of parents report <u>recent</u> self-harm behaviour (only one third reported no self harm ever in the youth's lifetime). Self-harm is less common after PRI.

Table 5. Parent-Reported	Recent Suicidality by Ti	me and PRI	Completion <sup>15</sup>				
	Dec DDI (N. 100)	3-6M P	ost-PRI*	1-2Y Po	ost-PRI*	3-4Y P	ost-PRI
	Pre-PRI (N=129)	C (N=63)	PC (N=32)	C (N=60)	PC (N=18)	C (N=31)	PC (N=9)
Suicidal Thoughts	46%	8%	47%	7%	22%	10%	44%
Suicidal Plan	15%	3%	8%	2%	12%	3%	43%
Suicidal Attempt	17%	2%	4%	2%	0%	7%	17%
	(N=140)	(N=67)	(N=27)	(N=62)	(N=18)	(N=31)	(N=7)
Non-Suicidal Solf-Harm	37%	1%	18%	10%	17%	6%	13%

<sup>&</sup>quot;Cell proportions different for C/PC and Never/>1 Year Ago.4-12M Ago/Past 3 Months 3N Post-PRI for Thoughts (2(4) = 15.4, p = .004; = 45), Plan (2(4) = 14.3, p = .005; = 40), and Self-Harm (2(4) = 11.9, p = .002; = .42); at 6M Post-PRI for Attempt (2(4) = 17.4, p = .02; = .34), but no differences at any other timepoint for any indicator (p = .003).

# Hospital visits, police involvement & running away



## HOSPITAL VISITS

Before PRI, visits to a hospital 16 were common for PRI youths. Table 6 displays parent-reported hospitalization in the three months before completing the survey. When asked about lifetime history of visits to the hospital, parents report 44% for substance use, 63% for mental health reasons, and 51% for other reasons. After PRI, the numbers of hospital visits within the first year were comparatively low, particularly for treatment completers.

Table 6. Parent-Reported Most Recent 3 Months' Hospital Visits by Time and PRI Completion							
	Pre-PRI	3M Po	st-PRI	1-2Y Post-PRI		3-4Y Post-PRI	
	N=150	C (N=65)	PC (N=33)	C (N=65)	PC (N=20)	C (N=31)	PC (N=8)
Substance Use	21%	3%	14%	5%	5%	7%	40%
Mental Health	20%	6%	27%	3%	8%	19%	38%
Other	13%	4%	4%	8%	18%	7%	0%

<sup>16</sup> The reasons for hospitalization are complicated; 'overdose, injury, or accidents' might be indicative of substance use and/or mental health issues. Respondents may indicate mental health and addiction issues for the same hospital visit.

### POLICE INVOLVEMENT & ILLEGAL BEHAVIOUR

Pre-PRI, parents reported that 46% of youths had police involvement in the <a href="three-months">three-months</a> before applying to PRI. Only 30% reported that their child had never been involved with police for such things as being arrested, charged, or detained in a juvenile detention facility. Post-PRI, police involvement and illegal behaviour decreased (Table 7), particularly among treatment completers.

Table 7. Parent-Reported Recent Contact with Police Post-PRI by Time and PRI Completion

	Pre-PRI	3-6M P	ost-PRI	1-2Y P	ost-PRI	
	N=178	C (N=75)	PC (N=40)	C (N=70)	PC (N=31)	
Police Contact	46%	15%	38%	10%	16%	
Illegal Behaviour	35%	12%	22%	10%	16%	

### RIINNING AWAY

Youth on the run are at high risk for involvement with crime, drugs, homelessness, unprotected or forced sex, prostitution, and sexually transmitted diseases. In North America, about 1 in 7 teens (14%) runs away. By parent report pre-PRI, over one half (54%) of youths had run away in their lives; one in four in the three months before parents completed their survey. Post-PRI, the percentage of parents who reported that their child had recently run away was lower than the North American average if they completed the program (Table 8).

Table 8. Parent-Report of Youth Running Away in Past

THI CC IVIC	Jillio D	y minic i	ana i m	Compi	CLIOII			
	Pre- PRI	3-6M Post-PRI		1-2Y Post-PRI		3-4Y Post-PRI		
	N=161	C (N=72)	PC (N=33)	C (N=72)	PC (N=23)	C (N=30)	PC (N=8)	
Run in Last 3M	26%	3%	15%	4%	9%	0%	0%	

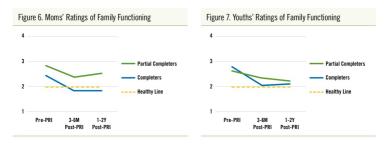
Note: Running away becomes a less meaningful health indicator as youth age.



# Family



Family functioning is measured with the McMaster Family Assessment Device (FAD)17, scored from 4 (most unhealthy) to 1 (healthiest); scores BELOW 2 are considered HEALTHY. Before PRI, scores were 2.5 or higher – about a standard deviation or more above 'healthy'. The amount of improvement experienced by moms was significant; they improved about a half a point. which is a standard deviation, and they maintained those gains. Moms of completers and partial completers changed similarly 18. although moms of completers, on average, report healthier functioning before and after the program than moms of partial completers (Figure 6). There was not yet enough data to assess dads (we more recently poll both parents specifically, and dads are less likely to complete our surveys). Youths before the program rate FAD around 2.7, unhealthy. After the program, they rate at the healthy level if they completed and 2.3 if they partially completed. The amount of change for all youths was significant and, statistically, they change similarly, regardless of treatment completion (Figure 7)<sup>19</sup>.



<sup>17</sup> Epstein, N. B., Baldwin, L. M., & Bishop, D. S. (1983). The McMaster Family Assessment Device: General Function Sub-Scale. 18 Interaction between change and completion NS (F(51.2) = 1.4, p = .2); change was significant (F(33) = 19.0, p < .001, 2 = .37 (large)). 19 Interaction between change and completion NS (F(13,2) = .2, p = .7); change was significant (F(13) = 4.7, p = .05, 2 = .28 (large)).

# Parent's missed work

Missed work is common among parents trying to support their struggling youth. In the <a href="https://documents.org/lines/">https://documents.org/</a> Parents are missing significant work due to their child's issues; moms miss about 15% of their work time, dads about 8%. After PRI, fewer days of work, less than 2%, were missed for both parents. The difference in missed days was significant for moms at 1-2Y Post-PRI; moms whose family completed the program missed less work than those whose family did not (Table 9).

Table 9. Number of Days Work Missed for Parents Post-PRI by Time and PRI Completion

	Pre-PRI	3-6M P	ost-PRI	1-2Y Post-PRI*20		
N (moms) / (dads)		C	PC	С	PC	
	163 / 136	93 / 75	39/31	81 / 66	29/22	
Moms avg missed work	9.0	0.4	1.0	0.2	1.0	
Dads avg missed work	4.7	1.0	1.4	0.6	0.7	



# SATISFACTION WITH TREATMENT



### SATISFACTION DETAILS

Understanding client satisfaction allows us to celebrate successes and review areas for improvement. Scores are on a scale from 1(Very Dissatisfied) to 5 (Very Satisfied). Table 10 shows scores for youths and parents as an average over all posttreatment assessment times, as there was very little discrepancy based on time since departure or program completion. In general, parents and youths rated PRI with high satisfaction.

	YOUTHS (N=145)	MOMS (N=284)	DADS (N=105)
OLE	4.2	4.7	4.7
Individual Therapy <sup>21</sup>	4.3	4.6	4.6*
Frontline Staff	4.3	4.7	4.7
Groups	3.6	4.4	4.4
Family Therapy	3.7	4.2	4.4
Mentor	3.5	3.3	3.6
Academics	4.1	4.4	4.2
Transition	3.4	3.8	3.7
Aftercare	3.1	3.3	3.2
Overall Treatment Quality <sup>22</sup>	4.1*	4.3*	4.5*

Note: OLE scores from families who completed at least OLE; Individual & Family Therapy, Staff, Groups, Academics, & Mentor, reported for clients who completed at least Phase 3. Transition & Aftercare reported if clients completed Transition.

<sup>21</sup> Dads rated Individual Therapy higher if they completed than if they partially completed (F(102) = 9.1, p = .003, 2 = .03 (small))

<sup>22</sup> Completers rated overall quality higher than partial completers according to Youths (F(148) = 4.3, p = .002, 2 = .011), Moms (F(342) = 6.7, p = .01, 2 = .02) and Dads (F(124) = 6.7, p = .01, 2 = .06)

# REPORTABLE INCIDENTS

## DETAILS ABOUT INCIDENTS AT PRI

Staff at PRI keep a record of reportable incidents, including events such as absent without leave (AWOL), property damage, self-harm, and altercations. We use incident information for risk management and quality improvement. In 2020, there were 105, in 2019 there were 59 reported incidents; in 2018, there were 98. In 2020, the most common type of incident was AWOL (37%) followed by physical injury (14%), the latter often occur during sports activities. The most common stage of treatment for incidents was OLE (37%) or early Stage 2 (34%).







Pine River Institute Head Office 180 Dundas Street West, Suite 1410 Toronto, ON M5G 1Z8 T: 416.955.1453 F: 416.955.1652

If you have any questions or comments regarding this report, please contact: Dr. Laura Mills Director of Research & Evaluation laura.m@pineriverinstitute.com.