

RELATIONSHIP BETWEEN LENGTH OF STAY IN CAMPUS-BASED CARE PROGRAMS AND CHILD AND YOUTH BEHAVIOURAL OUTCOMES



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Background

- Campus-based care programs (sometimes called “residential treatment programs”) provide comprehensive support for children and youth in the child welfare system with complex emotional and behavioural needs.¹
- There is a lack of research investigating associations between Length of Stay (LOS) in campus-based care programs and child and youth emotional, behavioural, and mental health outcomes.²⁻⁴
- This gap potentially contributes to limited evidence-based supports for children and youth with complex emotional and behavioural needs in campus-based care programs.

Results

Lower-Risk Sample (N = 462)

Sociodemographic and Service-Related Characteristics

	n	M (SD)		n	M (SD)
Age (years)	462	13.83 (2.89)	RI change	343	-0.71 (4.54)
LOS (days)	462	278.22 (255.85)	HRB (pre)	409	2.21 (3.66)
CAFAS (pre)	307	117.59 (46.37)	HRB (post)	367	3.01 (5.85)
CAFAS (post)	296	99.16 (51.49)	HRB change	367	0.58 (5.40)
CAFAS change	295	-18.68 (40.17)	Gender, male (%)	213	46.10%
RI (pre)	355	2.40 (4.24)	Gender, female (%)	230	49.80%
RI (post)	343	1.76 (4.51)	Gender, diverse (%)	15	3.20%

Higher-Risk Sample (N = 60)

	n	M (SD)		n	M (SD)
Age (years)	60	11.93 (3.29)	RI change	60	-23.07 (42.10)
LOS (days)	60	491.32 (283.43)	HRB (pre)	60	15.90 (12.51)
CAFAS (pre)	59	131.19 (35.77)	HRB (post)	60	7.03 (12.43)
CAFAS (post)	59	109.83 (50.02)	HRB change	60	-8.87 (15.96)
CAFAS change	58	-20.86 (34.66)	Gender, male (%)	33	55.00%
RI (pre)	60	35.83 (34.55)	Gender, female (%)	25	41.70%
RI (post)	60	12.77 (30.65)	Gender, diverse (%)	2	3.30%

Research Questions

- Are age at admission, gender, emotional and behavioural well-being scores in children associated with LOS in campus-based care programs?
- Is LOS in campus-based care associated with a change in emotional and behavioural well-being scores and quality of discharge placement among children and youth who participate in campus-based care programs?

Methods

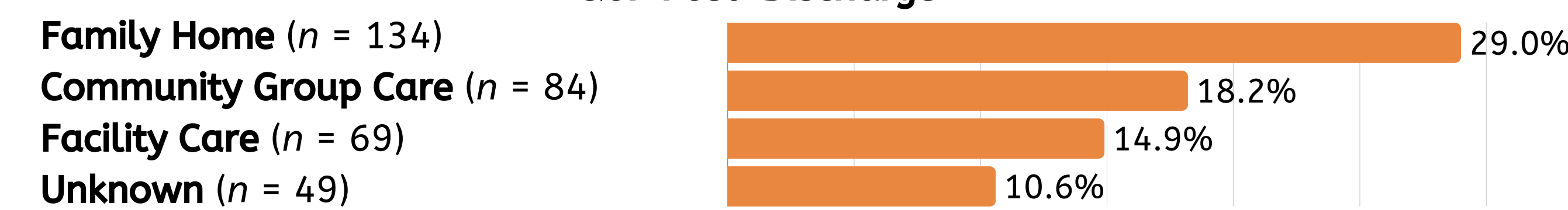
- Setting:** Hull Services, a charitable youth mental health provider in Calgary, Alberta that offers campus-based care programming.
- Study Design:** Retrospective cohort study using de-identified administrative data from Hull Services campus-based care programs between years of 2015-2025.
- Sample:** Children and youth 4-17 years old (N = 522) subdivided based on the total number of High Risk Behaviours (HRB) and Restrictive Interventions (RI) during their first 30 days. Lower risk: RI and/or HRB < 20; Higher risk: RI and/or HRB >= 20.
- Measures*:** Sociodemographic characteristics (age in years, gender), emotional and behavioural wellbeing at intake and discharge (Child and Adolescent Functional Assessment Scale [CAFAS] scores⁵, number of HRB and RI), and post-discharge placement (Quality of Placement [QoP]). *All measures reported by staff (except gender).

Measure Conditions for Analyses

CAFAS (pre)	Intake scores	CAFAS (post), CAFAS change	LOS > 90 days
HRB (pre)	LOS > 30 days	HRB (post), HRB change	LOS > 60 days
RI (pre)	LOS > 30 days	RI (post), RI change	LOS > 60 days

- Analysis:** Descriptive statistics, Pearson correlations, and multiple linear and multinomial logistic regressions were conducted.

QoP Post-Discharge



Note: Family Home (e.g., family home, independent living), Community Group Care (e.g., staffed homes, group care), Facility Care (e.g., correctional facility, hospital), Unknown (e.g., non-placement program, absent without official leave)

QoP Post-Discharge



Note: Family Home (e.g., family home, independent living), Community Group Care (e.g., staffed homes, group care), Facility Care (e.g., correctional facility, hospital), Unknown (e.g., non-placement program, absent without official leave)

Research Question 1:

- Younger children had longer LOS ($r = -.28, p < .001$).
- Youth with higher baseline HRB (pre) and RI (pre) also had longer LOS ($r = .11, p = .033$; $r = .22, p < .001$, respectively).

- Younger children had longer LOS ($r = -.38, p = .003$).

Research Question 2:

- LOS was not associated with HRB change ($R^2 = 4.6\%, p = .015$), RI change ($R^2 = 3.0\%, p = .113$), or CAFAS change ($R^2 = 0.4\%, p = .955$).

- LOS was not associated with HRB change ($R^2 = 13.0\%, p = .180$), RI change ($R^2 = 9.1\%, p = .390$), or CAFAS change ($R^2 = 4.3\%, p = .795$).

QoP	LOS Adjusted OR ^a	95% CI ^b
Family Home	1.002	1.000-1.004
Community Group Care	1.003	1.001-1.006
Facility Care	1.001	0.999-1.004
Unknown	Referent	Referent

^aOdds Ratio; adjusted for age, gender, CAFAS (pre), HRB (pre), and RI (pre)
^bConfidence Interval

QoP	LOS Adjusted OR ^a	95% CI ^b
Family Home	0.994	0.985-1.003
Community Group Home	0.99	0.981-1.000
Facility Care	0.992	0.982-1.001
Unknown	Referent	Referent

^aOdds Ratio; adjusted for age, gender, CAFAS (pre), HRB (pre), and RI (pre)
^bConfidence Interval

Conclusions

- Younger children and those with higher baseline needs (e.g., HRB and RI) had longer lengths of stay.
- Length of stay was not associated with changes in emotional and behavioural outcomes. Although the average client showed reductions in CAFAS, HRB and RI between admission and discharge, length of stay was not significantly associated with changes in these outcomes when controlling for other variables. However, longer length of stay was associated with a slightly higher likelihood of discharge into home and less restrictive placements in the lower-risk group.
- Findings suggest that length of stay is more closely related to placement outcomes than child emotional and behavioural wellbeing.
- This research helps address the evidence gap in understanding how length of stay in campus-based care is associated with child and youth wellbeing and placement outcomes.
- Future research should explore additional individual- and service-level factors that may predict variation in length of stay, placement outcomes and emotional and behavioural wellbeing of children and youth in campus-based care.

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