

1 ABSTRACT # 08

2 ABSTRACT AND KEYWORDS

(o8) 2 stage outcomes project regarding Day Treatment for pre-teens. Stage 1 is an exploratory, using a convenience sample of referral and discharge profiles, gathered between November 2000 and October 2003. Stage 2 will use referral, discharge and 6 month follow-up data for 40 – 60 successive referrals, starting November 2003 (Day treatment, pre-teens, Kidslink, convenience sample, successive referrals, discharge, follow-up, Ontario, Waterloo)

2.1 ABSTRACT DATE / UPDATE

June 22, 2004

3 SERVICE TYPE

Day treatment for pre-teens.

4 SERVICE DESCRIPTION

Day treatment at kidsLINK (School Treatment Program) is an intensive service which offers children a specialized therapeutic milieu, while effectively maintaining the child's place in the community. The day treatment program integrates its activities with a local Board of Education in order to provide an appropriate educational program while the child's mental health needs are addressed.

5 AGENCY CONTEXT: REFERRAL TYPES AND VOLUMES

These agencies accept higher severity referrals only, and provide intensive services only, for teens and pre-teens. Less intensive services are offered for pre-schoolers, The agencies accept about 200 high-severity referrals per year in their common intake. (see www.bcfpi.com | Core Functions | Triaging | Papers for comparison between KL-Lwd (Kidslink-Lutherwood (Waterloo region)) and Ontario referral profiles.

6 OUTCOMES SAMPLE TARGET

The initial data has been from a convenience sample of cases available to provide data at discharge. From November 2003 the agency will seek discharge and 6 and 12 month follow-up data from 40 – 60 successive discharges. This '2004' sample and paired comparisons will provide a more credible estimate of effect size than the preceding, unpaired, convenience sample

7 DATA GATHERING POINTS AND METHODS

7.1 STAGE 1

'Before' data from a convenience sample of 70 parents, Nov 2000- Sept 2003 and 'After' data for 19 Discharges, July 2002 – Oct 2003. Average age at referral, 8.9 years, average stay 12 months, 84% males.

7.2 STAGE 2

As of Oct 30 2004, paired data had been gathered for 11 successive discharges (provided by parents at discharge) occurring between Nov 1 2003 and Oct 30 2004. 100% were male, average age at admission was 10.3 years, average stay 14.5 months. No 6 month follow-up data has been gathered on these, but is pending on 5 and overdue on 4 of these cases.

8 START DATE

December 2000

9 QUARTERLY UPDATES

9.1 PROGRESS

9.2 PROBLEMS

9.3 REVISIONS TO PLAN

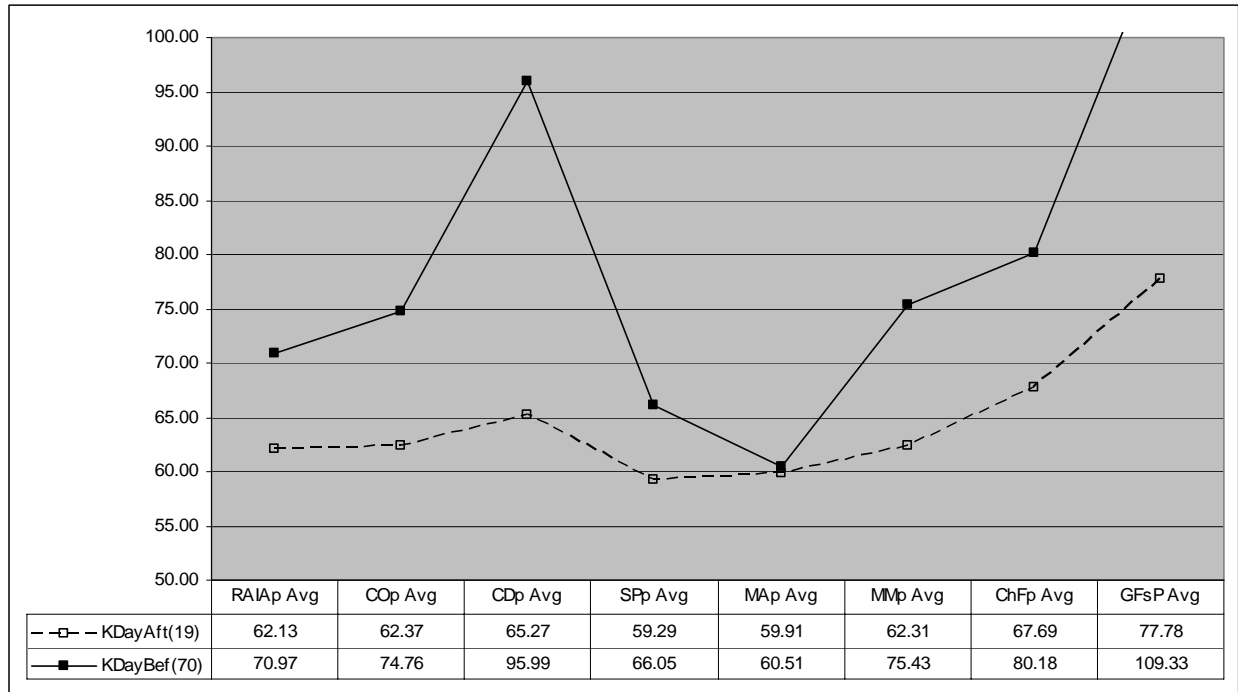
As of November 2003, outcome and satisfaction data will be sought from 40 – 60 successive discharges, and 6 month outcome data. Average profiles will be compared, and effect sizes will be computed and compared to evidence-based benchmarks.

10 INTERIM REPORTS

10.1 CONVENIENCE SAMPLE, UN-PAIRED DATA TO OCT 2003

Before' data from a convenience sample of 70 parents, Nov 2000- Sept 2003 and 'After' data for 19 Discharges, July 2002 – Oct 2003. Average age at referral, 8.9 years, average stay 12 months, 84% males. 7 of the 19 cases with 'After' data also had 'Before' data.

10.1.1 PRE-POST COMPARISONS



- All 'After' averages were lower than 'Before' averages for Mental health and functioning scores which started above the clinical threshold of 70... from as high as 3.2 SD to 0.8 SD.
 - All average scores were below the clinical threshold (70) at discharge, except for Family Adjustment, which dropped 3.1 SD, from 109 to 78.

10.1.2 CLIENT SATISFACTION UPON DISCHARGE

- Data not gathered.

10.1.3 EFFECT SIZES FOR CASES WITH HIGH 'BEFORE' SCORES

- Calculation not justified, given exploratory nature of initial phase of this outcomes project.

10.1.4 EFFECT SIZES COMPARED TO AVAILABLE BENCHMARKS

- Calculation not justified, given exploratory nature of initial phase of this outcomes project.

10.1.5 SERVICE COST

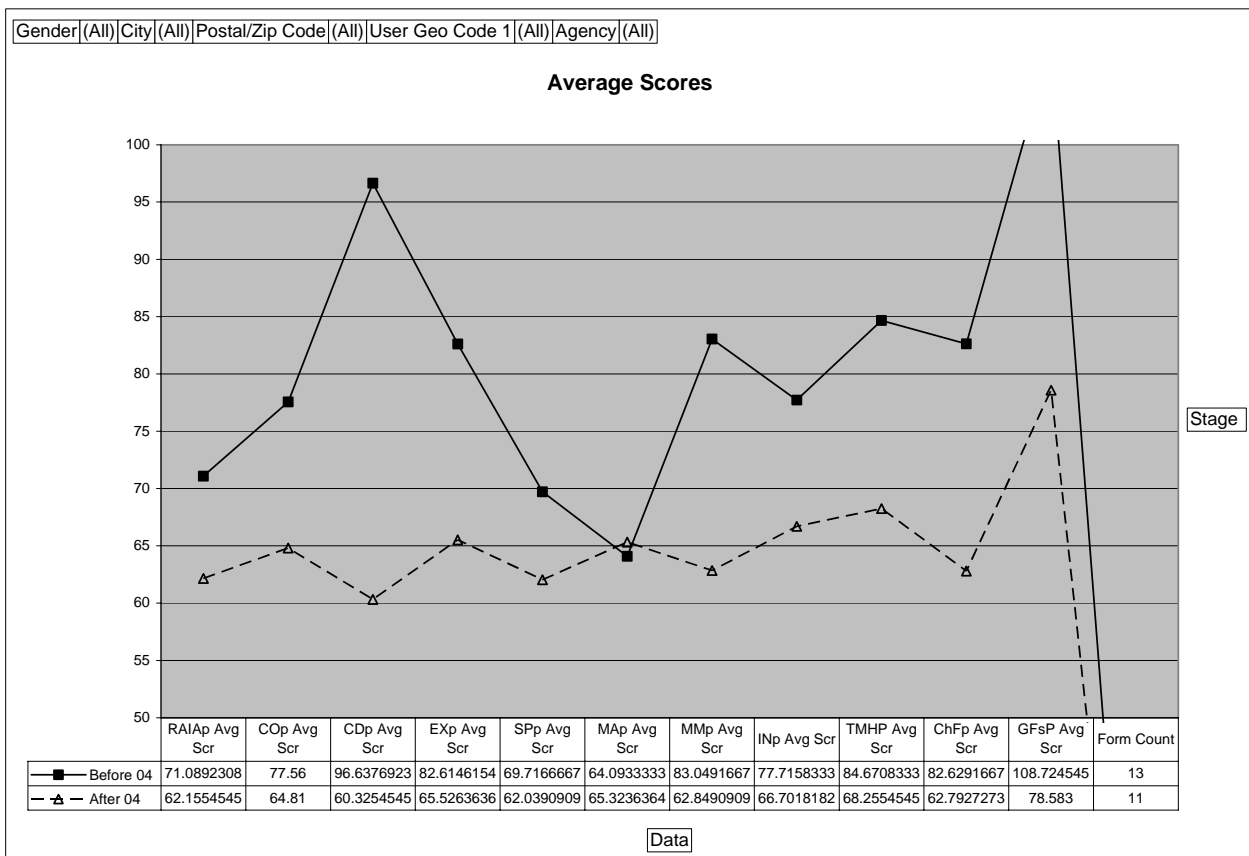
\$12,750.00 per case.

10.1.6 CONCLUSIONS

10.2 REPRESENTATIVE SAMPLE, PAIRED DATA, 11 SUCCESSIVE DISCHARGES FROM NOV. 2004.

As of Oct 30 2004, paired data had been gathered for 11 successive discharges (provided by parents at discharge) occurring between Nov 1 2003 and Oct 30 2004. 100% were male, average age at admission was 10.3 years, average stay 14.5 months.

10.2.1 PRE-POST COMPARISONS



- All 'After' averages were lower than 'Before' averages for Mental health and functioning scores which started above the clinical threshold of 70.
 - All average scores were below the clinical threshold (70) at discharge, except for Family Adjustment, which nevertheless dropped 30 T-score points, from 109 to 79.

10.2.2 EFFECT SIZES

- Effect size = (Average Before Scores – Average After scores) / ((Standard deviation; 'Before' + Standard deviation; 'After') / 2)

Problem Area	Effect Size		
	All 11 pairs Effect Size	Pairs with 'Before >70 Effect Size # of pairs	
Reg Attention	0.77	1.21	8
Cooperativeness	1.47	2.21	9
Conduct	1.54	2.11	9
Externalizing	1.58	2.09	9
Seperation	0.43	0.96	5
Anxiety	-0.08	1.65	4
Mood	1.16	1.71	8
Internalizing	0.62	1.03	9
Total Mental Health	1.13	1.35	9
Child Functioning	1.60	2.67	8
Family adjustment	1.03	1.61	8

- Effect sizes between 0.2 – 0.5 are 'small'; 0.5 – 0.8 are 'maoderate', >0.8 are 'large'¹
- The first column in the above table corresponds to the preceding graph... it considers all pairs, irrespective of starting scores; the difference between 'Before' and 'After' averages, and the underlying variability amongst scores, and computes an "effect size" as defined above this table.
- The 2nd column considers only cases with starting scores >70 for each problem area.
- For all 11 pairs, the effect size for Anxiety is -0.08. i.e, if we ignore whether or not each child had a problematic anxiety score before service and calculate the effect for anxiety, it's close to zero.
- However, if we include only kids with high 'before' scores for each problem area (e.g. the 4 /11 kids with anxiety scores =>70), the effect in an area for kids with problems in that area is higher... most notably 1.65 for the 4 kids with high initial anxiety scores.
- **All of the effect sizes are 'large' (i.e., >0.8).**
- The large 'Family adjustment' effect size of 1.61 is encouraging, but the average discharge score of 78 (fig 10.2.1) may suggest a need for further attention in this area.

10.2.3 EFFECT SIZES COMPARED TO AVAILABLE BENCHMARKS

- An automated report is being developed in BCFPI, but is not currently available. In general however, these effects, with large and very large effect sizes are likely to compare favourably to the most effective evidence-based interventions in the literature.

10.2.4 CLIENT SATISFACTION UPON DISCHARGE

- Questions not available in BCFPI when data was gathered.

10.2.5 CONCLUSIONS

- These results are very promising, yet very tentative, due to small sample size (11 pairs). Data expected 1 year from now (Nov. 2005) should provide a better measure of KL STP program effect size and comparison to published results for effectiveness with similar problems and severity.

¹ Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). New Jersey: Lawrence Erlbaum.

11 FINAL REPORT

12 CONTACT INFORMATION

Patrick Flynn
Director of Children's Mental Health and Early Intervention Services
kidsLINK/NDSA
1855 Notre Dame Drive
St. Agatha, ON N0B 2L0

Tel: (519) 746-5437 Ext. 108
Fax: (519) 746-3055
email: pflynn@ndsa.on.ca
www.kidslink.ndsa.on.ca