

EXAMPLES OF BCFPI PLUG-IN REPORTS

Quarterly Summary for 14 Agencies And Pre-Post data for 2 Agencies

Cases Referred or Admitted Since Jan 1 2002, and Waiting or Active as of June 30 2003,

And

Cases Referred July 1 2003 - September 30 2003

1 Highlights

Section 2: Referrals, Admissions and Discharges

- The region's ratio of Active : Waiting cases continued to increase in Q3 (1:21 at end of Q2; 1.63 at end of Q3) (sec. 2.1)
- Referral rates ranged from 123 to fewer than 20 for specialized services. 6 / 13 agencies closed approx. as many cases as were referred, (Sec. 2.2)

Section3: Regional Admission Priorities

- The average severity of waiting cases is less than that of admitted cases. This suggests that more severe cases tend to be given admission priority (sec. 3)

Section 4: Details re Severity, Case Status and Problem Distribution

- Teens and pre-teens tend to have similar prevalences, higher than 3 – 6 year olds, except for Conduct and Ability to separate (sec, 4.1),
- 26% (245) of waiting cases have 0 or 1 (max= 8) scores >70; 28% (260) have waited for 4+ months with 4+ scores > 70; 13% (224) of cases have been active 4+ months with 0 or 1 score >70. Taken together, this suggests some opportunity to shift resources to more strategically and differentially serve these groups. (sec. 4.2).
- an agency specific analysis of waiting and newly referred cases with 0 scores >70, or 1 or both of Cooperativeness or Regulation of Attention scores > 70 details differing potential opportunities within agencies to respond quickly and cost-effectively to these cases, which constitute about 1/3 of the wait list (sec. 4.3)
- sec. 4.4 tabulates agency specific prevalences for each symptom group. Specialized agencies tend to have higher prevalence, and agency ranking varies amongst symptom groups.
- Evidence-based interventions are available for most symptom types. Many of these are (small) group interventions, (sec.4.5)¹

Section 4: Other Background

- More than 90% of cases would welcome 'initial responses'...readings, videos, support and parent skill groups (sec. 5.1)
- 16% of regional referrals (72 cases) are high risk,(i.e., low-income single family), with larger agency rates ranging from 27% - 12% , (sec 5.3)
- regional rates of 'other concerns' seem fairly low, with 'sleep', learning', 'fears', 'eating' and 'obsessions' cited in more than 10% of cases, (sec. 5.4) Specialized services tend to report a wider range and higher rates (sec. 5.5)

Section 5: Estimates for Costs and Benefits for offering Groups, Readings, Videos or 1 -3 session Consults for cases with 0 scores >70, or Attention and/or Cooperativeness > 70

- these suggest a 37% diversion from longer term service or wait list for new referrals at a quarterly resource cost of about \$11,000, offsetting average service costs of \$120K, for a 9:1 return on investment. Similar savings would be realized if these services were also offered to those cases continuing on the wait list, which have similar disorder profiles.

¹ See the Interview manual, chs. 5 and 6 re benchmarking evidence-based interventions. See 'Evidence-based Interventions' for details regarding the interventions and references .These items are available at www.bcfpi.com, and passwords can be obtained by e-mailing support@bcfpi.com.

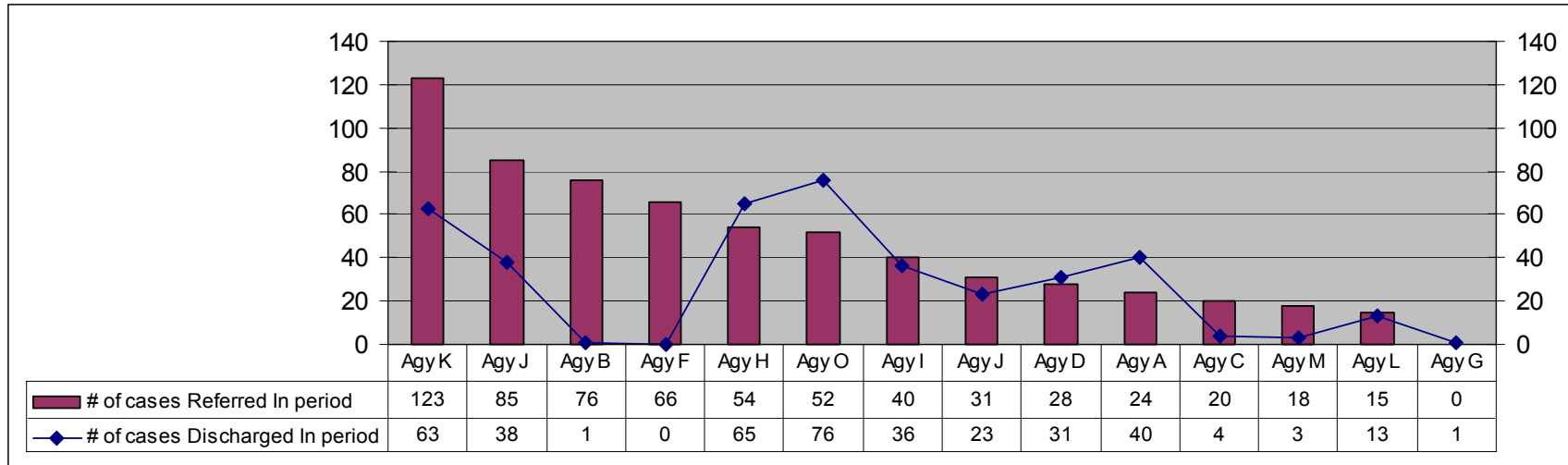
2 Activity Overviews

2.1 Referrals, Admissions and Discharges, Jul 1 03 – Sep 30 03 (Q3 03)

Data	Agy A	Agy c	Agy D	Agy E	Agy G	Agy H	Agy I	Agy J	Agy K	Agy L	Agy M	Agy O	Totals	
# of cases Waiting before period	126	143	15	189	7	124	72	91	194	12	102	164	1 239	WL, Apr 30
# of cases Active before period	135	101	84	101	6	319	108	241	128	38	53	185	1 499	Act, Apr 30
<i>Ratio: Active : Waiting</i>	<i>1.07</i>	<i>0.71</i>	<i>5.60</i>	<i>0.53</i>	<i>0.86</i>	<i>2.57</i>	<i>1.50</i>	<i>2.65</i>	<i>0.66</i>	<i>3.17</i>	<i>0.52</i>	<i>1.13</i>	<i>1.21</i>	<i>Act/ WL, Apr 30</i>
# of cases Referred In period	24	20	28	31	0	54	40	85	123	15	18	52	490	
# of cases Admitted In period	25	45	29	54	0	44	51	109	106	15	9	106	593	
# of cases Discharged In period	40	4	31	23	1	65	36	38	63	13	3	76	393	
# cases Non-materialized In period	0	56	0	0	0	1	1	0	33	1	0	0	92	
# of cases Waiting After period	125	62	14	166	7	133	60	67	178	11	111	110	1 044	WL, Sep 30
# of cases Active After period	120	142	82	132	5	298	123	312	171	40	59	215	1 699	Act, Sep 30
<i>Ratio: Active : Waiting</i>	<i>0.96</i>	<i>2.29</i>	<i>5.86</i>	<i>0.80</i>	<i>0.71</i>	<i>2.24</i>	<i>2.05</i>	<i>4.66</i>	<i>0.96</i>	<i>3.64</i>	<i>0.53</i>	<i>1.95</i>	<i>1.63</i>	<i>Act/ WL, Sep 30</i>
Avg days to admission, all adms	49	106	25	120		34	174	70	74	48	133	143	95	
Min days to admission, all adms	0	0	0	0		0	29	0	0	0	111	0	0	
Max days to admission, all adms	287	258	335	279		181	384	527	464	181	154	486	527	
Avg stay, discharged cases	163	175	127	60	175	176	112	169	140	215	166	86	135	
Min stay, discharged cases	0	65	6	0	175	0	2	0	0	8	135	0	0	
Max stay, discharged cases	535	254	351	306	175	530	449	504	455	590	187	506	590	
Avg wait, WL cases	246	157	310	182	297	292	112	80	189	100	199	163	194	
Min wait, WL cases	0	6	33	6	209	0	0	1	0	11	7	0	0	
Max wait, WL cases	624	575	585	484	518	634	622	400	636	214	418	617	636	
Avg stay, continuing cases	315	166	191	164	410	333	205	187	93	156	209	199	212	
Min stay, continuing cases	0	0	15	1	222	4	6	0	0	1	6	0	0	
Max stay, continuing cases	624	609	496	497	568	628	622	600	365	430	365	606	628	
Avg days to non-materialize		111				24	137		133	214			120	
Min days to non-materialize		0				24	137		0	214			0	
Max days to non-materialize		227				24	137		301	214			301	

- Agy F and Agy B are not reported in this and other sections involving case status (WL, Act, etc.), as their admission and discharge dates were unavailable
- 'F' had 66 referrals in the quarter and 'B' had 76.

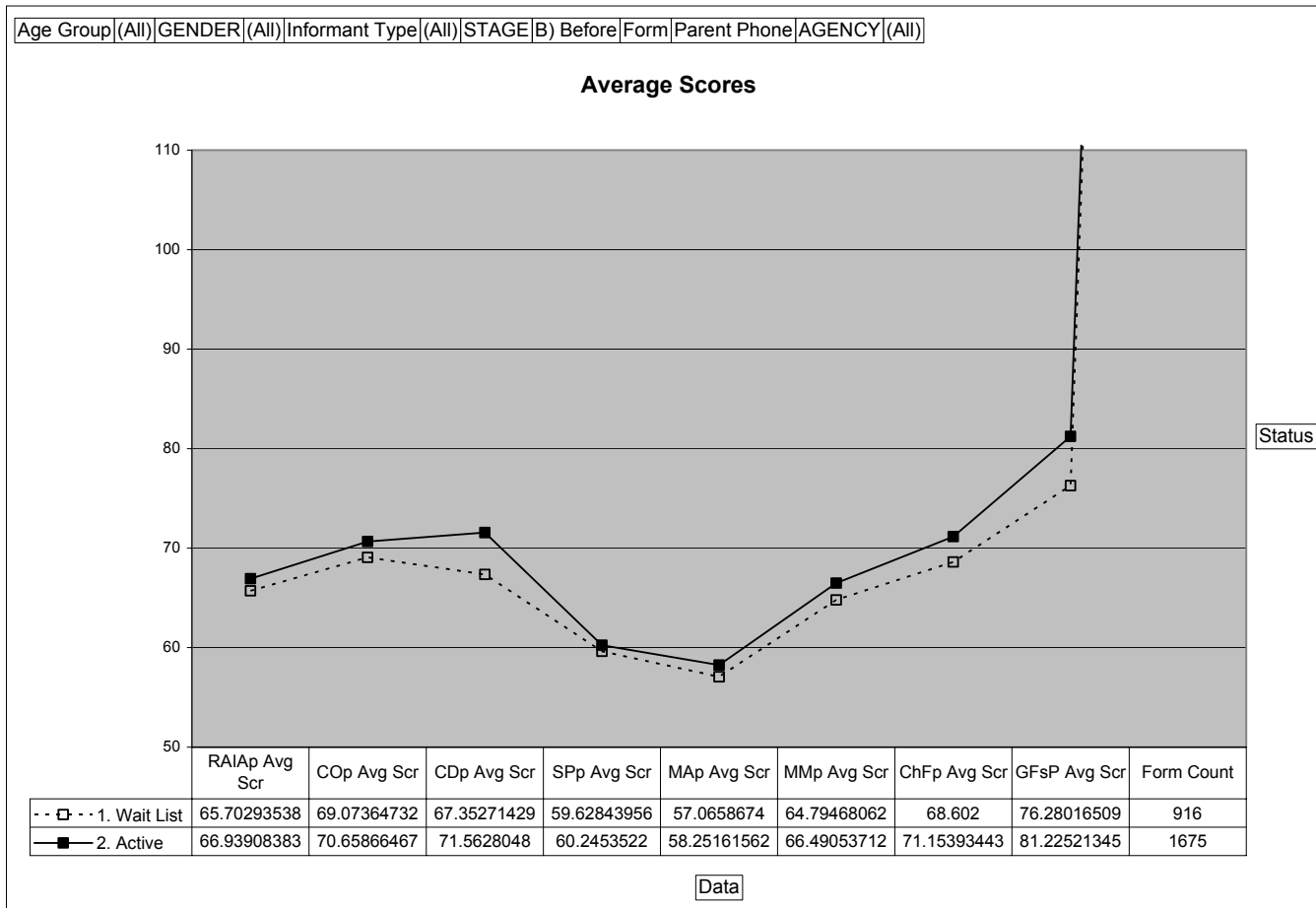
2.2 Referrals and discharges, Sorted by Referral Volume



2.3 Comments re Activities

- Table 2.1 shows 7 / 12 agencies have more than twice as many active as Waiting cases
 - The region's ratio of Active : waiting cases, as of Sep 30 03 is 1.63, up from 1.21 on June 30 03, with 1698 active cases, up 13% from Jun 30 03,
- Figure 2.2 shows a wide range (123 – 24) for quarterly referrals amongst primary outclient agencies.
 - The 2 agencies with the highest referral rates cleared about ½ as many cases as were referred in the quarter .
 - Agencies with lower referral rates tended to clear cases during the quarter at a similar rate to which new case were referred in the quarter.

3 Average BCFPI Scores for Waiting Versus Active Cases

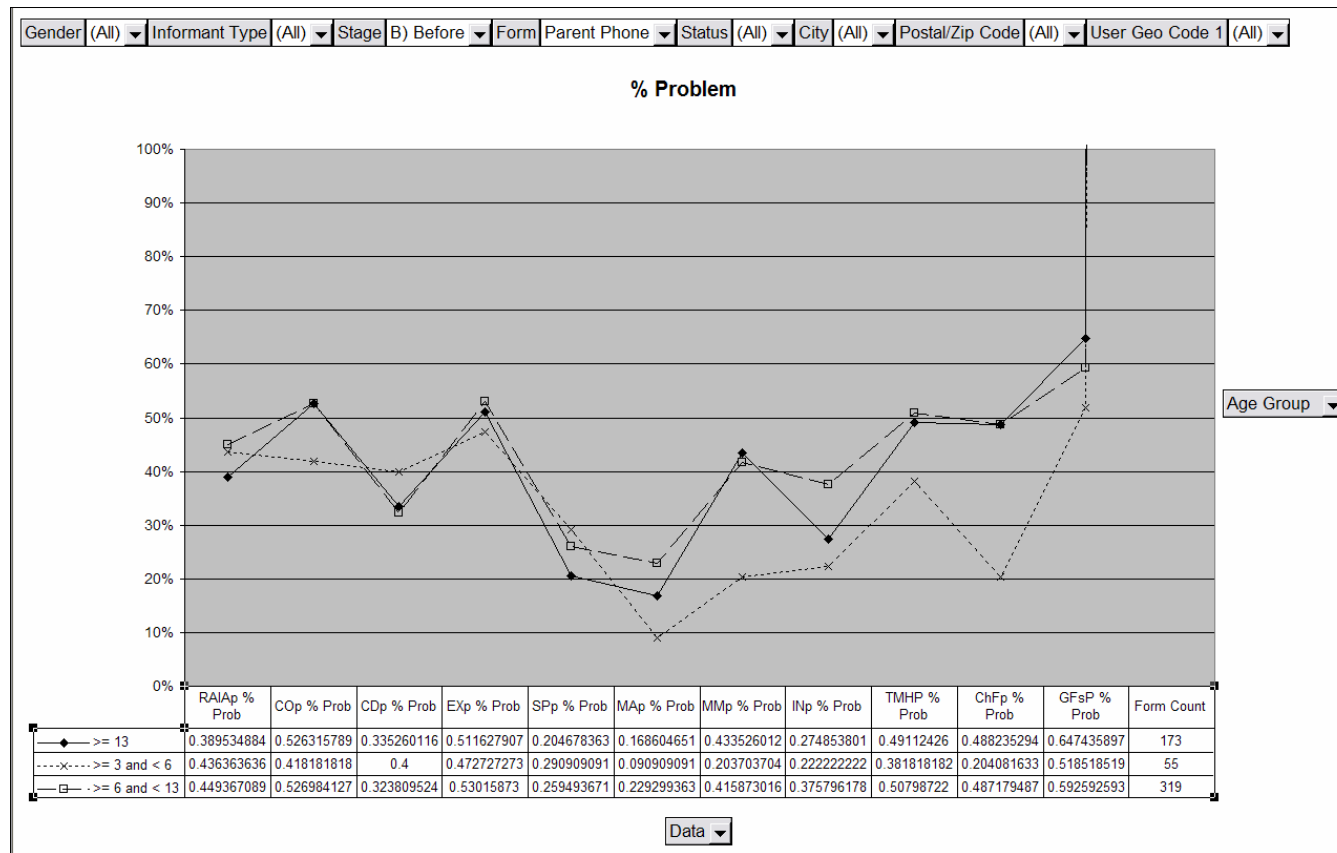


- Active cases (solid line) have slightly higher average severity than waiting cases (dotted lines)
- This is consistent with the system's desire to give admission priority to more severe cases.
- Other items are being considered, such as the availability of cost-effective services corresponding to case needs,
- These issues are examined in section 4.

4 Details re Severity, Case Status and problem Distribution

4.1 Regional Referral and Problem Rates for 3 Age Groups (Q3 03 Referrals)

This shows % of cases with scores > 70 for each of the domains listed across the bottom of the graph, for the 3 age groups shown. Scores > 70 would be expected in about 2% of the general child population.



- About 10% of Q3 referrals are 3 – 5.9 yrs old; 33% are 13 – 18 yrs old, and 57% are 6 – 12.9 yrs old.,
- Severe difficulties with cooperativeness and attention management are seen in 40% - 52% of kids >6 yr.
- Mood management (depression) symptoms are seen in 40 – 45% of pre-teens and teens.
- Functional problems are more common in pre-teens and teens (50%) than 3 – 5.9 yr olds (20%).
- 66% of families of teens, 59% of pre-teens and 51% of pre-schooler's families report adverse impact from their child's problems.

RAIA = Regulation of Attention, Impulsivity and Activity, __p = Compared to a population sample CO = Cooperativeness. CD = Conduct. EX = Externalizing. SP = Ability to Separate From Parent. MA = Ability to Mange Anxiety. MM = Ability to Manage Mood. IN = Internalizing. TMH = Total Mental Health . ChF = Child Functioning. GFs = Family adjustment.

4.2 Regional Overview of Tenure and Problem Rates Amongst Active, Waiting and Non-Materialized cases (as of Sep 30 03)

Number of scores > 70 (out of 0 – 6
MH scores + 2 Functioning scores
>70; max = 8 scores > 70)

Status	Months	0	1	2	3	4	5	6	7	8	Grand Total	
1. Wait List	0	20	20	22	20	19	15	18	8		142	Waiting Cases No scores > 70 13% 123 1 score > 70 13% 122 0 or 1 scores > 70 27% 245 4+ scores >70, WL 4+ Mo 28% 260
	1	17	8	5	8	11	7	4	5		65	
	2	12	9	5	6	10	8	5	1	1	57	
	3	8	10	17	11	12	14	9	3	2	86	
	4	14	5	20	12	16	9	13	6	2	97	
	5	9	10	8	10	13	7	5	2	1	65	
	6+	43	60	60	55	66	55	40	20	5	404	
1. Wait List Total		123	122	137	122	147	115	94	45	11	916	
2. Active	0	17	23	19	31	26	28	23	7	2	176	Active case No scores > 70 10% 165 1 score > 70 12% 202 0 or 1 scores > 70 22% 367 or 1 scores >70, Act 4+ Mo 13% 224
	1	20	17	17	15	19	15	17	10	1	131	
	2	13	17	16	32	31	22	19	10	1	161	
	3	19	17	13	26	25	12	19	6	1	138	
	4	15	16	18	18	24	35	10	4	2	142	
	5	9	20	11	9	13	13	20	5		100	
	6+	72	92	90	110	135	150	115	47	16	827	
2. Active Total		165	202	184	241	273	275	223	89	23	1 675	
3. Discharged	0	20	17	19	8	10	8	3			85	Closed < 1 mo from admission 23% Closed < 2 mo from admission 10% Closed < 3 mo from admission 13% Closed < 4 mo from admission 8% Closed < 4 mo from admission 10% Closed < 6 mo from admission 9% Closed > 6 mo from admission 26% 0 or 1 probs, closed =<3mo 19%
	1	9	3	3	6	3	3	8	1	2	38	
	2	6	6	10	7	5	7	5	2		48	
	3	4	4	6	2	4	5	4	1		30	
	4	4	4	7	5	4	9	4		1	38	
	5	5	2	8	5	4	2	4	2		32	
	6+	13	6	13	15	12	21	13	3	1	97	
3. Discharged Total		61	42	66	48	42	55	41	9	4	368	
4. Non-Mat	0		1	1		1	1				4	
	1		1	1		2					4	
	2	5	1	3	2	1	3		2		17	
	3	3	3		8	3	4	2	1		24	
	4	1	2	2	2	3	2	1			13	
	5	1		1		2		5			9	
	6+	1	2	3	1	1	2	1			11	
4. Non-Mat Total		11	10	11	13	13	12	9	3		82	
		13%	12%	13%	16%	16%	15%	11%	4%			

- This shows that (123) 13% of cases waiting on Sep 30 03 have no scores >70. Many of these are likely to be served satisfactorily by large group or brief services or videos
- A further 122 (13%) have only 1 score >70, and many of these may also be served by such services.
- 13% (224) cases with 0 or 1 score > 70 have been active for 4 or more months. (Many) of these may be discharge candidates.
- 260 cases have 4 + scores >70 and have waited 4+ months for service
- 49% of cases closed with no service had 4+ scores > 70.

Agencies should run this report in house, and:

1. Attempt to shift treatment resources to longer wait, higher severity cases
2. Offer lower cost supports and training groups to lower severity cases,
3. Review priority of incoming referrals against long wait, high severity cases
4. Review high severity cases discharged with no service (bottom row, 50 cases with 3+ scores >70).

4.3 Agency Rates: Waiting Cases and Subsequent Q3 Referrals with 0 scores >70, or Cooperativeness or Regulation Of Attention >70

	Cases with no disorder scores > 70, or 1 or both of Attention or Cooperativeness >70					6) Waiting, end of Q3 with	
	At Beginning of Quarter			4) Ref'd in Q3	5) = 1) +4)	0 - 8 scores >70	7) =5) / 6)
	1) Wait List	2) Active	3)Total (1 +2)				
Agy A	35	41	76	4	39	125	31%
Agy B				19			
Agy C	5	23	28	3	8	62	13%
Agy D	2	6	8	5	7	14	50%
Agy E	39	31	70	8	47	166	28%
Agy f				13			
Agy G	0	0	0	0	0	7	0%
Agy H	24	36	60	13	37	133	28%
Agy I	11	38	49	5	16	60	27%
Agy J	3	89	92	22	25	67	37%
Agy K	19	42	61	34	53	178	30%
Agy L		1	1	1	1	11	9%
Agy M	12	16	28	5	17		
Agy N	1		1		1		
Agy O	34	71	105	23	57	110	52%
Grand Total	185	394	579	155	308	933	33%

- Section 5.1 will show that more than 90% of cases indicate they'd be interested in readings, videos, support or training groups to assist with their problems.
- Evidence indicates that many lower severity cases, (0 scores >70) or cases only having attention or cooperativeness problem(s) will be satisfactorily served by such services.
- Column 1 shows the numbers of such cases waiting for service in each agency at the beginning of the quarter (total = 185)
- Column 4 tabulates referrals of such cases during the quarter (total = 155)
- Column 5 shows the total # of these cases seeking service during the quarter (Grand total = 308)
- **Column 7 shows the % of total wait list occupied by these cases (Total = 33%)**

Strategic Implications

- Column 4 shows the quarterly referral rate for such cases. Agencies with higher quarterly volumes (>10) could usefully consider large group, evidence-based interventions for these cases.
- Agencies with lower volumes, but large backlogs of such cases could also consider such groups, or readings or videos, or brief consults (1 – 3 sessions being offered successfully at some sites,
- Section 6 presents a hypothetical cost-benefit analysis of providing immediate skill and knowledge resources to cases in columns 4 and 5, which projects an 8X – 9X return on investment, through avoidance of higher cost extended treatment services,

4.4 Agency Detail: Prevalence of Scores > 70 for 8 Core Domains, Amongst Q3 Referrals

Reg Attn & Activity		Cooperativeness		Conduct		Capacity to Separate	
Agy C (22)	59.1%	Agy M (5)	80.0%	Agy C (22)	68.2%	Agy I (38)	42.1%
Agy I (38)	55.3%	Agy D (25)	72.0%	Agy D (25)	68.0%	Agy C (22)	31.8%
Agy D (25)	52.0%	Agy A (25)	64.0%	Agy M (5)	60.0%	Agy K (104)	29.8%
Agy H (55)	50.9%	Agy E (24)	62.5%	Agy H (55)	47.3%	Agy A (25)	28.0%
Agy A (25)	48.0%	Agy C (22)	59.1%	Agy I (38)	39.5%	Agy F (63)	25.4%
Agy J (88)	47.7%	Agy H (55)	58.2%	All (561)	34.3%	Agy B (43)	25.0%
All (561)	43.1%	Agy J (88)	54.5%	Agy K (104)	33.7%	All (561)	24.5%
Agy B (43)	41.9%	All (561)	51.7%	Agy J (88)	33.0%	Agy M (13)	23.1%
Agy M (5)	40.0%	Agy M (13)	50.0%	Agy O (56)	32.7%	Agy O (56)	21.8%
Agy O (56)	40.0%	Agy K (104)	48.1%	Agy A (25)	28.0%	Agy H (55)	20.0%
Agy E (24)	37.5%	Agy I (38)	47.4%	Agy M (13)	23.1%	Agy M (5)	20.0%
Agy K (104)	35.6%	Agy F (63)	45.9%	Agy B (43)	21.4%	Agy J (88)	19.3%
Agy M (13)	33.3%	Agy O (56)	44.4%	Agy E (24)	20.8%	Agy D (25)	16.7%
Agy F (63)	31.1%	Agy B (43)	35.7%	Agy F (63)	14.8%	Agy E (24)	4.2%
Management of Anxiety							
Agy M (5)	40.0%	Agy A (25)	64.0%	Agy M (5)	100.0%	Agy M (5)	100.0%
Agy A (25)	34.8%	Agy F (63)	62.3%	Agy D (25)	69.6%	Agy D (25)	94.1%
Agy F (63)	29.0%	Agy E (24)	45.8%	Agy C (22)	63.6%	Agy H (55)	76.9%
Agy E (24)	25.0%	Agy I (38)	42.1%	Agy F (63)	57.4%	Agy C (22)	76.2%
Agy K (104)	25.0%	Agy J (88)	40.9%	Agy J (88)	54.5%	Agy J (88)	69.0%
All (561)	20.2%	All (561)	40.5%	Agy A (25)	54.2%	Agy A (25)	66.7%
Agy J (88)	19.3%	Agy D (25)	40.0%	Agy H (55)	50.9%	All (561)	60.7%
Agy I (38)	18.4%	Agy M (5)	40.0%	Agy M (13)	50.0%	Agy K (104)	60.6%
Agy H (55)	16.4%	Agy M (13)	38.5%	All (561)	47.0%	Agy I (38)	55.3%
Agy O (56)	16.4%	Agy C (22)	36.4%	Agy I (38)	44.7%	Agy M (13)	53.8%
Agy B (43)	12.2%	Agy H (55)	34.5%	Agy K (104)	39.8%	Agy E (24)	52.2%
Agy C (22)	9.1%	Agy O (56)	34.5%	Agy O (56)	36.4%	Agy F (63)	50.8%
Agy D (25)	8.0%	Agy K (104)	32.0%	Agy E (24)	33.3%	Agy O (56)	43.8%
Agy M (13)	7.7%	Agy B (43)	28.6%	Agy B (43)	17.5%	Agy B (43)	38.5%
Depressive Symptoms							
Global Child Functioning							
Family Adjustment							

- This table shows the referral rate, for each agency, of cases with high levels of symptoms (higher than most symptomatic 2% of population) in 6 mental health and 2 functional domains.
- It also shows the inter-agency variation in problem prevalence.
 - E.g., 22 cases (59,1%) of Agy C's Q3 referrals have scores re Attention and Impulse control higher than the most impaired 2% of the population, The average for all agencies is 43.1%, and 'F's rate is lowest @31.1%.
- Agency ranking varies with problem area. E.g., for depression, F's rate, @ 62.3% is second highest in the region.
 - Sec, 4.3 focused on cases with 0 scores >70, or cases with 1 or both of Attention or Cooperativeness >70.
 - This section focuses on cases with 1 or more scores >70, and rates for each single problem area,

4.5 Regional Summary: Symptom Groups and Evidence-Based Interventions: Q3 03 referrals

	Age group & # of scores GT 70 =>3 & <6	Evidence-based Refer. #	Age group & # of scores GT 70 =>6 & <13	Evidence-based Refer. #	Age group & # of scores GT 70 =>13	Evidence-based Refer. #
Regulate Attention	24	2,3	143	2,3	70	
Cooperativeness	23	5,11,4,13	169	13,5	95	3
Conduct	22	5,11,4,13	104	5,13	63	3,12
Seperation Anxiety	16		83	6	35	6
General Anxiety	5		73	6	33	6
Managaing Mood	11		133	7,8	79	10,9
# with matching evid.-based interv.	69		705		306	
# with matching evid.-based interv.	68%		100%		81%	
	Evidence Based Ref # (above)					
	2	Parent Training Groups (Barkley)				
	3	Classroom Behavioral Training (duPaul)				
	5	Video-Based parent Group Training (Webster-Stratton)				
	6	Cool Kids (Wignall)				
	7	Beh.Prob. Solving & Self-Control Groups (Stark)				
	8	Cognitive Behavioral T Group (Stark)				
	9	CBT Group (Lewinsohn)				
	10	Interpersonal Therapy (Mufson)				
	11	Parent Child Interaction Therapy (Eyeberg)				
	12	MST (Henggeler)				
	13	COPE Groups (Cunningham)				

- E.g., 24 3 – 6 year olds had RAI A scores >70 (~ADHD)
- Evidence-based interventions # 2 and 3 are likely to be helpful for this problem, for this age group.
- 69 of the problems amongst Q2 2003 3-6 year old referrals can be cross-referenced to manualized, Evidence-based interventions. These cover 68% of the high severity symptoms in this age group.
- 100% of 6 -13 year olds' and 81% of >13 year old symptoms can be similarly cross-referenced to manualized, Evidence-based interventions
- many of these are group interventions, and hence, may be able to serve higher volumes than single-case interventions,

Ideally, sites would be able to demonstrate that their current interventions to these problems were as cost-effective as the cited evidence-based interventions, based on pre-post BCFPI scores from samples of cases having high 'pre' scores on each of the 6 symptom groups

5 Other Background Information re Q3 Referrals

5.1 Readiness

Code	Data	1) No	2) Maybe	3) Yes	Maybe or Yes
Readings	Answers	16	18	226	244
	% Answers	6%	7%	87%	94%
Videos	Answers	21	22	215	237
	% Answers	8%	9%	83%	92%
Discussion Groups	Answers	31	54	173	227
	% Answers	12%	21%	67%	88%
Skill Building Groups	Answers	17	53	191	244
	% Answers	7%	20%	73%	93%

- More than 90% of cases responded 'yes' or maybe' re their interest in readings, videos or groups relevant to their concerns.
- These results are very similar for all sites,

5.2 Barriers: Items Which Might Diminish Ability to Use Service

Code (370 respondents)	1) None	2) A little	3) A lot, but can participate	4) Too much to participate	5) N.A.
Getting to centre	82%	12%	4%	1%	1%
Parking costs	40%	3%	3%	1%	54%
Day hours only	63%	19%	12%	2%	3%
Evening hours only	76%	13%	4%	2%	4%
Babysitting	81%	8%	4%	1%	6%

- data column #2) indicates that transportation, service hours and babysitting are 'A little' concern for >10% of cases..
- However, column 4) indicates that these would render service inaccessible for a small %, i.e., about 1%.
- Providers would see this information on their Standard parent report as the case entered the system, and would presumably assist clients with serious accessibility problems.

5.3 Family Structure and Income

Site	# of respondents	% of respondents who		Respondents who are single parent with Fam income <\$20K		Fam Inc >\$60K
		are single parent	have fam. Income <\$20K	% of total respondents	#	
Agy A	19	11%	26%	11%	2	16%
Agy B	30	50%	33%	27%	8	13%
Agy C	20	20%	20%	5%	1	35%
Agy D	11	45%	45%	27%	3	19%
Agy E	6	50%	0%	0%	0	33%
Agy F	48	42%	19%	15%	7	25%
Agy H	40	65%	24%	18%	7	20%
Agy I	33	36%	18%	12%	4	21%
Agy J	88	35%	34%	21%	18	24%
Agy K	90	38%	17%	12%	11	19%
Agy L	4	50%	25%	25%	1	0%
Agy M	11	27%	27%	18%	2	9%
Agy N	3	33%	66%	33%	1	0%
Agy O	47	49%	19%	15%	7	43%
All	450	40%	24%	16%	72	23%

- Rate of single parent family status, together with annual family income <\$20K averages 16% for the region.
- Children from Low income single parent families who are unable to access supervised recreation are likely to benefit from assistance to do so. Such participation has been shown to improve child adjustment and well-being, and diminish externalizing problem rates.

5.4 Other Concerns: Regional Summary

All Q3 refs	1) None	2) A little	3) A lot	2 or 3	Not asked
Bowel	24%	3%	2%	5%	72%
Compulsions	25%	4%	2%	7%	69%
Developmental	20%	5%	3%	8%	72%
Eating	20%	7%	4%	12%	68%
Fear	16%	8%	9%	17%	67%
Fire	2%	1%	0%	1%	98%
Learning	14%	9%	9%	19%	67%
Mutisim	13%	0%	1%	2%	86%
Obsessions	19%	6%	4%	10%	71%
Sex	2%	0%	0%	0%	98%
Sleep	13%	9%	12%	22%	66%
Speech	24%	5%	2%	6%	69%
Substance	26%	3%	2%	4%	70%
Thoughts	24%	4%	1%	4%	72%
Tics	23%	3%	1%	5%	72%
Urination	24%	4%	4%	8%	68%

- Sites are using their own protocols re when / whether to ask thses questions.
 - The general guideline is to enquire re any areas which seem to be of concern to the client, or which are part of agency's core services.
 - Some sites ask all referrals about each of these possible concerns.
 - 5 / 16 domains were of 'A little' or 'A lot' of concern across all agencies.
 - Section 5.5 shows much higher rates, in some agencies.
-
- In sec, 5.5 (following), rates ranged from 7 concerns (agency F) to 12 concerns (agency D).
 - Agencies with lower rates tended to be primary community agencies. (agency B; 8 domains). Tertiary centers (Agency C, 11 domains) and residences (agency D, 12 domains) tended to have higher rates

5.5 Other Concerns by Agency

Agy B (37)	1) None	2) A little	3) A lot	2 or 3	Not asked	Agy C (18)	1) None	2) A little	3) A lot	2 or 3	Not asked
Bowel	22%	0%	0%	0%	78%	Bowel	39%	0%	6%	6%	56%
Compulsions	46%	0%	0%	0%	54%	Compulsions	22%	17%	6%	22%	56%
Developmental	5%	8%	3%	11%	84%	Developmental	28%	11%	6%	17%	56%
Eating	41%	16%	0%	16%	43%	Eating	33%	11%	0%	11%	56%
Fear	22%	14%	8%	22%	57%	Fear	11%	11%	28%	39%	50%
Fire	0%	0%	0%	0%	100%	Fire	0%	0%	0%	0%	100%
Learning	19%	22%	8%	30%	51%	Learning	11%	22%	22%	44%	44%
Mutisim	0%	5%	0%	5%	95%	Mutisim	17%	0%	0%	0%	83%
Obsessions	14%	5%	0%	5%	81%	Obsessions	22%	17%	6%	22%	56%
Sex	0%	0%	0%	0%	100%	Sex	0%	0%	0%	0%	100%
Sleep	32%	22%	8%	30%	38%	Sleep	11%	17%	17%	33%	56%
Speech	32%	14%	0%	14%	54%	Speech	28%	11%	6%	17%	56%
Substance	22%	8%	0%	8%	70%	Substance	39%	0%	6%	6%	56%
Thoughts	19%	0%	0%	0%	81%	Thoughts	28%	11%	0%	11%	61%
Tics	8%	11%	0%	11%	81%	Tics	17%	17%	6%	22%	61%
Urination	38%	8%	5%	14%	49%	Urination	39%	6%	6%	11%	50%

Agy D (25)	1) None	2) A little	3) A lot	2 or 3	Not asked	Agy E (25)	1) None	2) A little	3) A lot	2 or 3	Not asked
Bowel	48%	4%	8%	12%	40%	Bowel	61%	13%	4%	17%	22%
Compulsions	60%	0%	4%	4%	36%	Compulsions	57%	13%	9%	22%	22%
Developmental	28%	20%	12%	32%	40%	Developmental	78%	0%	0%	0%	22%
Eating	36%	16%	8%	24%	40%	Eating	65%	22%	0%	22%	13%
Fear	32%	4%	24%	28%	40%	Fear	48%	17%	13%	30%	22%
Fire	0%	0%	0%	0%	100%	Fire	0%	0%	0%	0%	100%
Learning	8%	12%	44%	56%	36%	Learning	48%	30%	4%	35%	17%
Mutisim	36%	0%	12%	12%	52%	Mutisim	17%	0%	0%	0%	83%
Obsessions	36%	12%	12%	24%	40%	Obsessions	57%	9%	13%	22%	22%
Sex	0%	0%	0%	0%	100%	Sex	0%	0%	0%	0%	100%
Sleep	36%	12%	12%	24%	40%	Sleep	26%	30%	26%	57%	17%
Speech	40%	4%	16%	20%	40%	Speech	65%	13%	0%	13%	22%
Substance	44%	8%	12%	20%	36%	Substance	74%	4%	0%	4%	22%
Thoughts	44%	12%	4%	16%	40%	Thoughts	78%	0%	0%	0%	22%
Tics	52%	8%	0%	8%	40%	Tics	74%	0%	4%	4%	22%
Urination	44%	16%	0%	16%	40%	Urination	57%	9%	13%	22%	22%

'Other Concerns, contd'

Agy F (69)	1) None	2) A little	3) A lot	2 or 3	Not asked	Agy H (38)	1) None	2) A little	3) A lot	2 or 3	Not asked
Bowel	25%	7%	0%	7%	68%	Bowel	66%	5%	5%	11%	24%
Compulsions	25%	6%	4%	10%	65%	Compulsions	61%	11%	3%	13%	26%
Developmental	22%	4%	3%	7%	71%	Developmental	50%	18%	8%	26%	24%
Eating	16%	3%	14%	17%	67%	Eating	47%	18%	8%	26%	26%
Fear	23%	7%	13%	20%	57%	Fear	45%	11%	24%	34%	21%
Fire	0%	0%	0%	0%	100%	Fire	18%	11%	0%	11%	71%
Learning	17%	13%	7%	20%	62%	Learning	32%	13%	34%	47%	21%
Mutisim	3%	0%	0%	0%	97%	Mutisim	68%	0%	3%	3%	29%
Obsessions	30%	4%	0%	4%	65%	Obsessions	47%	16%	13%	29%	24%
Sex	0%	0%	0%	0%	100%	Sex	29%	0%	0%	0%	71%
Sleep	7%	4%	23%	28%	65%	Sleep	18%	16%	42%	58%	24%
Speech	29%	3%	0%	3%	68%	Speech	66%	3%	5%	8%	26%
Substance	30%	1%	3%	4%	65%	Substance	71%	3%	0%	3%	26%
Thoughts	23%	12%	0%	12%	65%	Thoughts	71%	3%	0%	3%	26%
Tics	25%	4%	4%	9%	67%	Tics	68%	5%	3%	8%	24%
Urination	23%	4%	6%	10%	67%	Urination	63%	8%	5%	13%	24%

Agy K (79)	1) None	2) A little	3) A lot	2 or 3	Not asked
Bowel	29%	4%	0%	4%	67%
Compulsions	29%	5%	3%	8%	63%
Developmental	29%	4%	1%	5%	66%
Eating	23%	5%	6%	11%	66%
Fear	13%	16%	10%	27%	61%
Fire	0%	0%	0%	0%	100%
Learning	22%	8%	6%	14%	65%
Mutisim	15%	0%	1%	1%	84%
Obsessions	20%	8%	6%	14%	66%
Sex	0%	0%	0%	0%	100%
Sleep	20%	11%	9%	20%	59%
Speech	29%	8%	0%	8%	63%
Substance	32%	4%	0%	4%	65%
Thoughts	28%	3%	3%	5%	67%
Tics	32%	1%	0%	1%	67%
Urination	27%	5%	5%	10%	63%

6 Cost Benefit Implications of Data re Severity and Data re Desire for Relevant Readings, Videos, Parent Support Groups and Parent Skill Building Groups (COPE)

- Tables I – Va on pgs 17 - 20 show details and assumptions whereby projected costs and benefits for requested interim services are calculated.
- These sections are based on quarterly referral rates, to allow an estimate of quarterly costs and benefits... here a total of 154 cases for Q3 with 0 scores >70, or Cooperativeness and / or Attention Management > 70. (1 or both functioning scores may also be > 70.
- Table II figures are based on reported field experience. COPE has been shown to be effective in controlled trials.
- 'Uptake' = % of cases likely to use the interim service if offered. Recall sec. 5.1 suggesting a 90% interest in such interim services.
- Costs are based on annual salaries + benefits of \$52,000 (\$27 /hour) and double the actual service time (preparation and admin).

The CMH system's total annual budget is approx. \$250M, and it serves approx. 60,000 cases per year (\$4600/case). A more conservative average system cost of \$2,000 per admitted case is used here to calculate avoided costs for cases admitted to full service.

Cases with no disorder scores >0, or 1 or both of Attention or cooperattiveness > 70			(0 or Ext >70, excluding Conduct >70)		
	Ref'd in Q	Waiting + Refd			
Agy A	4	39			
Agy B	19				
Agy C	3	8			
Agy D	5	7			
Agy E	8	47			
Agy G	13				
Agy H	13	37			
Agy I	5	16			
Agy J	22	25			
Agy K	34	53			
Agy M	5	17			
Agy O	23	57			
All	154	306			

Table II: Estimed %'s of clients who would use service and its reported effectiveness			
	Uptake	Reported % of 0 or Ext > 70 Excl. conduct cases satisfied by service	Cost of group, consult(s) readings or videos
Cope Group	50%	70%	\$1,062
Readings	80%	15%	\$20
Videos	80%	20%	\$35
3 session consults	50%	50%	\$159
Single session consult	59%	40%	\$53
Avg cost/admitted case			\$2,000

Table III: Hypothetical Scenario re Services to be offered to new referrals at each site					(0 Or Ext >70, excluding Conduct >70)
Cope	Readngs	Videos	3 session	1 session	
Agy A		y	y		
Agy B	y	y	y		
Agy C		y	y		
Agy D		y	y		y
Agy E		y	y	y	
Agy G		y	y		y
Agy H		y	y	y	
Agy I		y	y		y
Agy J	y	y	y		
Agy K	y	y	y		
Agy M		y	y	y	
Agy O	y	y	y		

If both readings and videos are offered, total # diverted = max for either
This envisages offering Cope groups where there are >16 referrals /quarter
- Max Cope group size is 25; a new group is added for each additional 25 or less after the first 25.
If a group is offered, # available to be diverted by reading or video is reduced by 50%
Group cost is based on 2X hours spent in sessions and hourly rate of clinician +15% benefits

Table IV: Quarterly Cost of Specified ('Y') Interventions at Each Site, based on Re. Vols of cases with					(0 Or Ext >70, excluding Conduct >70)				
If offered ONLY to new referrals					If offered to New Referrals + Waiting cases				
Cope	Readngs	Videos	3 session	1 session	Cope	Readngs	Videos	3 session	1 session
Agy A		\$51	\$90	\$318	Agy A		\$499	\$874	\$3,105
Agy B	\$1,062	\$243	\$426		Agy B		\$0	\$0	
Agy C		\$38	\$67		Agy C		\$102	\$179	
Agy D		\$64	\$112		Agy D		\$90	\$157	\$219
Agy E		\$102	\$179	\$637	Agy E		\$602	\$1,053	\$3,742
Agy G		\$166	\$291		Agy G		\$0	\$0	\$0
Agy H		\$166	\$291	\$1,035	Agy H		\$474	\$829	\$2,946
Agy I		\$64	\$112		Agy I		\$205	\$358	\$501
Agy J	\$1,062	\$282	\$493		Agy J	\$1,062	\$320	\$560	
Agy K	\$1,062	\$435	\$762		Agy K	\$2,123	\$678	\$1,187	
Agy M		\$64	\$112	\$398	Agy M		\$218	\$381	\$1,353
Agy O	\$1,062	\$294	\$515		Agy O	\$2,123	\$730	\$1,277	
Total cost, incl 3&1 session con				\$12,776	Total cost, incl 3&1 session cons.				\$27,945
Total cost, excl. 3&1 session coi				\$9,667	Total cost, excl. 3&1 session cons				\$16,079

- table 3 shows a reasonable hypothetical mix of interim services, which attempts to mirror current constraints and practices in the settings...
- Table 4 is based on quarterly referral volume , expected uptake if interim service offered, and service cost.

**Table Va: Quarterly WL Diversions for Selected Interventions at Each Site, based on Quarterly referrals
If offered only to new referrals with no scores >0, or 1 or both of Attent, or Coop >0 or 1 score >70**

	Cope	Readngs	Videos	3 session	1 session	Non-dup Total	Site cost / case
Agy A		0	0	1		1	\$348
Agy B	7	1	2			8	\$212
Agy C		0	0			0	\$220
Agy D		0	0		1	2	\$210
Agy E		0	1	2		3	\$348
Agy G		1	1		3	4	\$210
Agy H		1	1	3		4	\$348
Agy I		0	0		1	2	\$210
Agy J	8	1	2			9	\$194
Agy K	12	2	3			15	\$154
Agy M		0	0	1		2	\$348
Agy O	8	1	2			10	\$189
						0	
Total Diverted	34	9	13	8	5	60	
Cost / case	\$124	\$209	\$275	\$318	\$133		
					# diverted	60	
					% diverted	39%	
					\$ / diverted	\$214	
					Avoided \$	\$119,576	
					ROI	9 :1	

- If COPE is offered at Agy B's 19 lower severity Q3 referrals (0 or 1 score >70), table Va suggests it would be taken up by 50% (10 / 19 cases), and would be deemed sufficient by 70% of these (about 7 cases). Readings and videos would divert additional cases. Some of these would overlap, and a reasonable estimate of total diversions for Agy B is 8 cases / 19 'lower severity' referrals for the quarter.
- If the region had implemented the hypothetical mix of interim services, for Q3 2003, it would have expended resources worth approx. \$11,200 (table 4)
- It would have diverted approximately 60 'low severity' cases from extended service, offsetting \$119,576 in treatment cost, had these cases been eventually admitted for 'average' service.
- The 'Return on Investment' (ROI) would have been 9:1
- i.e , Targeting 'lower severity' cases upon referral with high efficiency, readings, videos, brief consultations, or large skill building group services is likely to increase the efficiency of the system by 9X for these low severity cases, compared to standard, average, 1:1 treatment, for these same cases. Recall that 90% + of cases request such services, if they are offered at time of referral (sec. 5.1)

**Table Vb: Quarterly WL Diversions for Selected Interventions at Each Site, based on Quarterly referrals
If offered cases (WL and and new referrals) with no scores >0, or 1 or both of Attent, or Coop >0 or 1 score >70**

	Cope	Readngs	Videos	Non-dup 3 session	1 session	Total	Site cost / case
Agy A		2	3	10		13	\$348
Agy B	0	0	0			0	
Agy C		1	1			1	\$220
Agy D		0	1		2	2	\$210
Agy E		3	4	12		16	\$348
Agy G		0	0		0	0	
Agy H		2	3	9		12	\$348
Agy I		1	1		4	5	\$210
Agy J	9	2	2			11	\$181
Agy K	19	3	4			23	\$175
Agy M		1	1	4		6	\$348
Agy O	20	3	5			25	\$168
						0	
Total Diverted	47	19	25	35	5	113	
Cost / case	\$112	\$208	\$273	\$318	\$133		
				# diverted	113		
				% diverted	37%		
				\$ / diverted	\$248		
				Avoided \$	\$225,596		
				ROI	8 :1		

- The cost to provide these services to 306 WL cases + new referrals with these clinical profiles is about \$22,000 (table IV, above), .
- 113 cases would be diverted.
- avoided costs would be \$226K
- the ROI for full implementation is 8:1.

Each approach... 'new referrals only', or 'new + waiting' provides approximately the same ROI, which is between 8: 1 and 9:1, depending on group size and distribution. Either diverts about 37% of 'low' severity cases from WL or costly extended services.

7 Pre-Post Changes in Mental Health and Functioning

The results in the following sections are descriptive results, based on convenience samples, of cases entering selected programs in 2 agencies, and sub-samples of cases leaving those programs.

Such an exploratory evaluation, as described here, is a reasonable first step, in day-day field practice.

A definitive assessment of program effectiveness would require random sampling of cases for pre-measures, and post measures from the same cases.

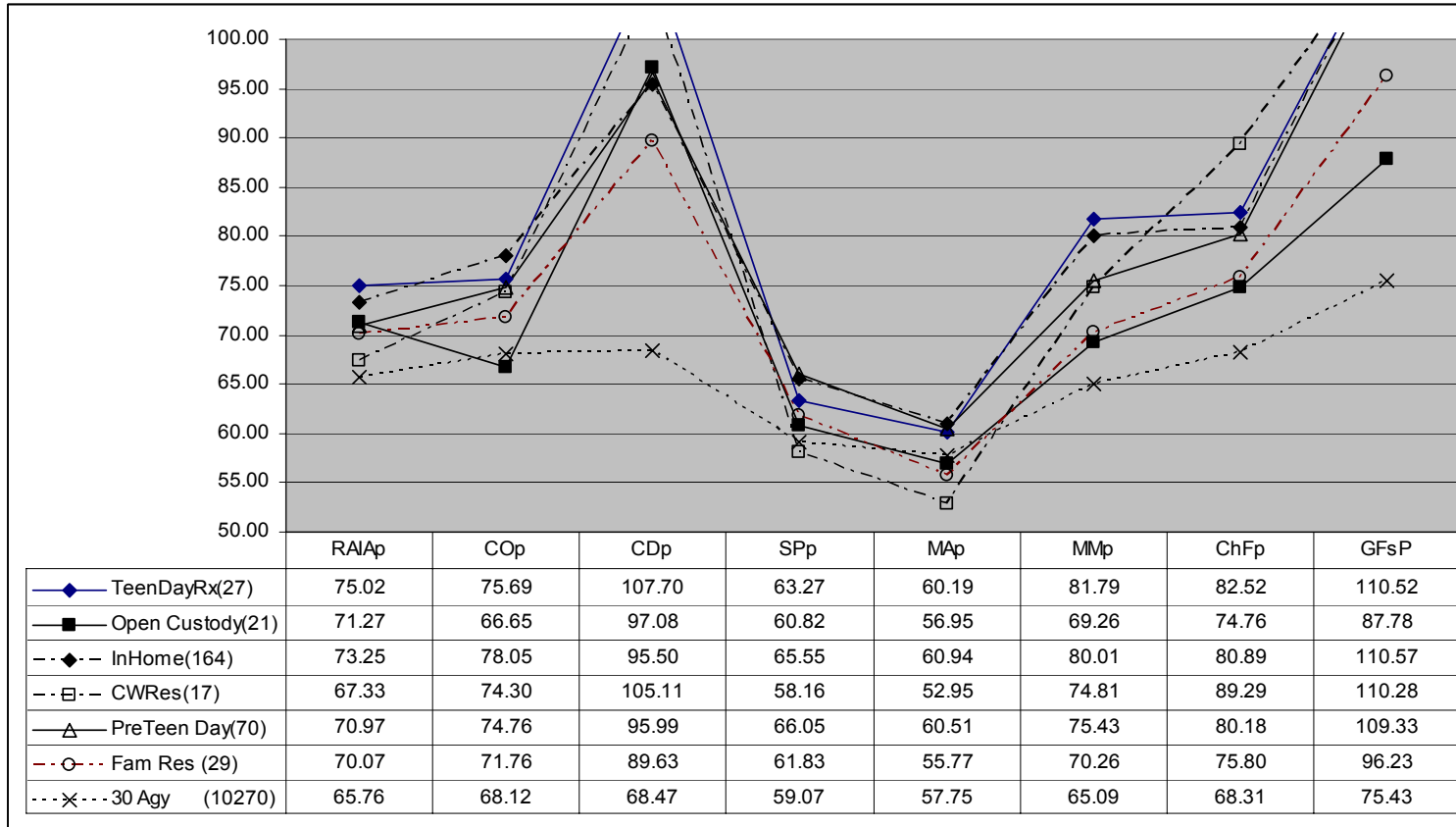
The agencies providing the data for this section are interested in 3 questions:

- A. Are they succeeding in their goal of restricting admissions to more severe cases?
- B. Are they having a positive impact on admitted cases?
- C. Is this impact as good as the best evidence-based interventions in the literature?

In general the descriptive data for these programs shows...

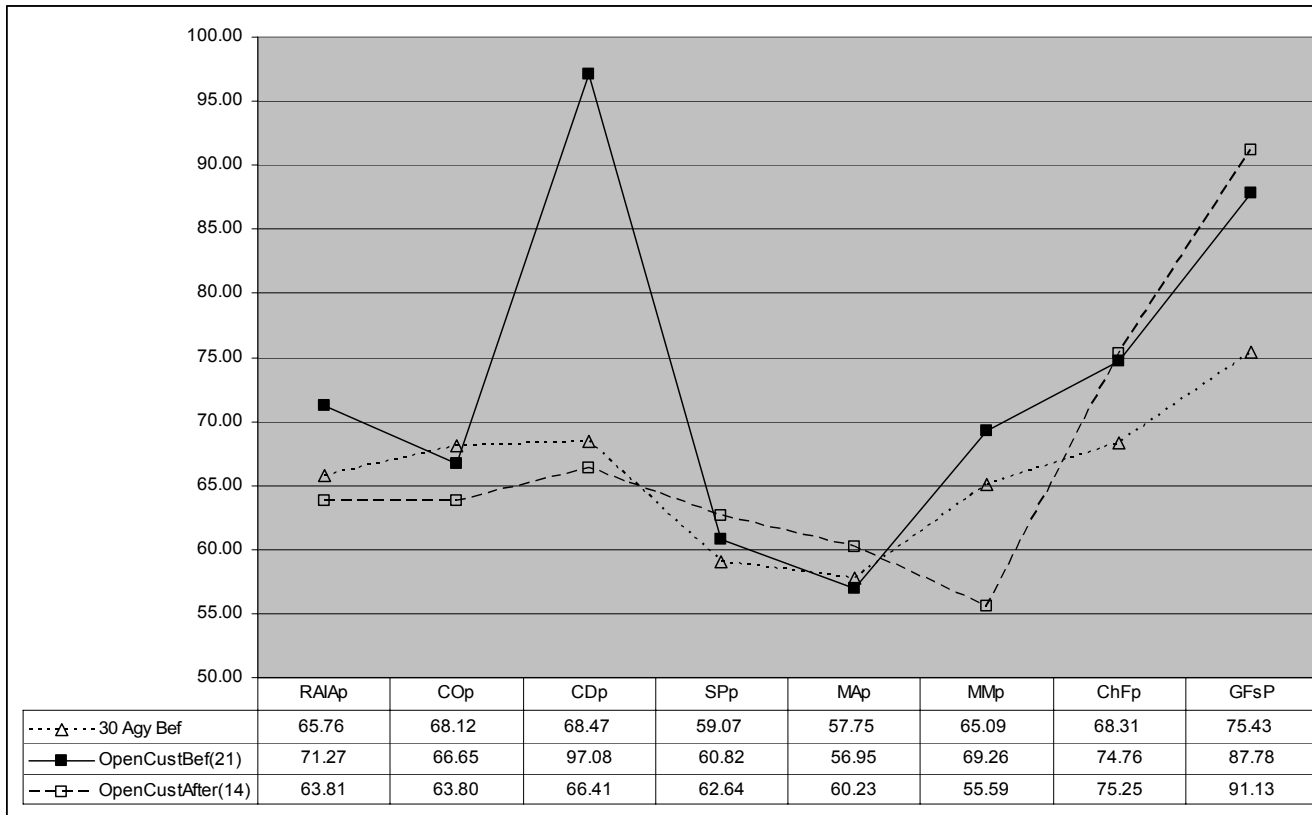
1. Admission scores for treatment programs are 1 or more SD's higher for Cooperativeness, Conduct, Mood Management, Child Functioning and Family adjustment, compared to contemporaneous average 'Before' scores for 10,270 referrals to 30 other agencies.. This difference is smaller for the custody program, except for Conduct. (sec. 7.1)... the sites do, in fact, seem to be selecting cases which are more severe than average.
2. All programs showed large reductions in average scores (more than 1 SD) for most domains whose 'before' averages were above 70.
3. Discharge scores for pre-teens, living at home, treated in residence, and pre-teens attending day treatment were usually well below the 'clinical' threshold score of 70. (secs. 7.6 and 7.7)
4. Discharge scores of cases attending other programs, if higher than 70 at admission, improved, but were often still above the '70' threshold at discharge. (secs.7.2 - 7.5).
5. Question C (benchmarking apparent effect size to evidence based interventions) is not addressed directly by this data, although the results seem promising,

7.1 Average BCFPI 'Before' Scores for 10,270 Cases at 30 Agencies versus Cases Accepted at 6 Programs in 2 Agencies Seeking to Admit More Severe Cases



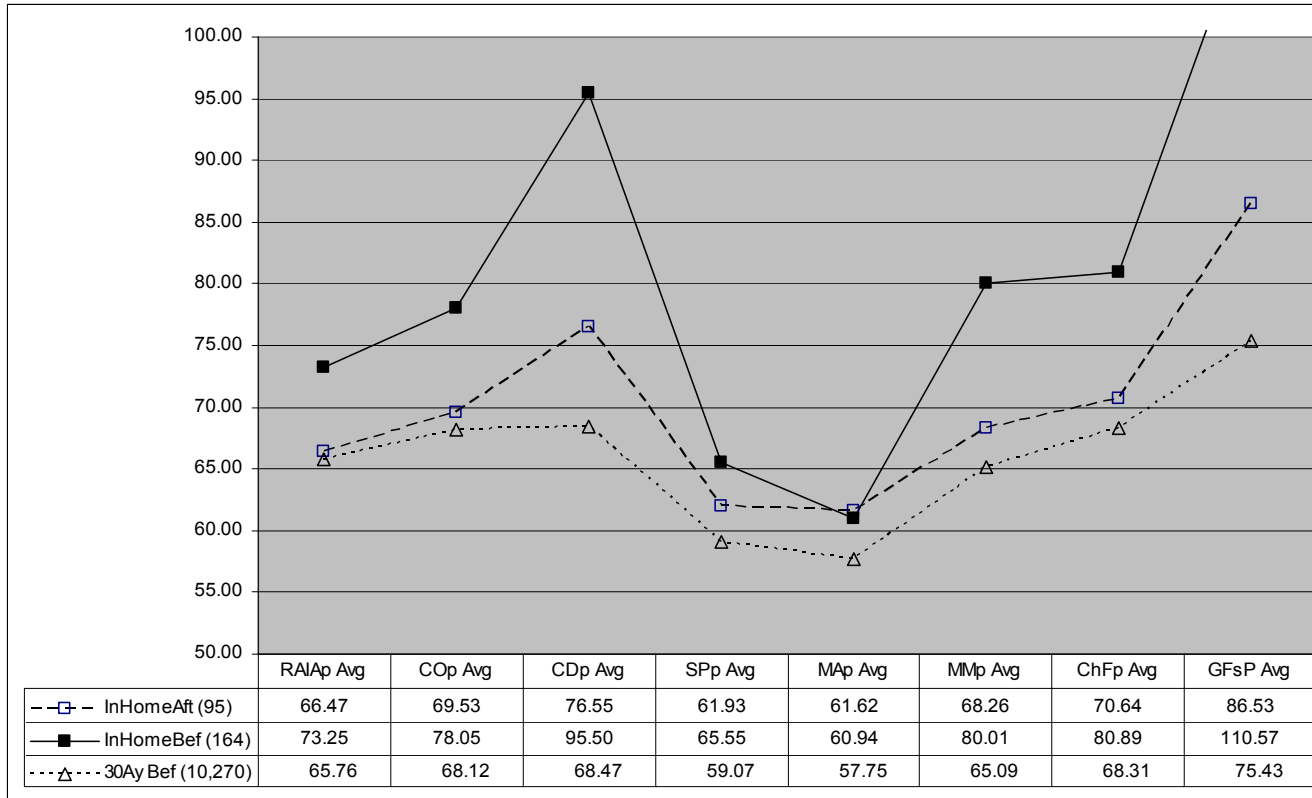
- The 6 current programs include 27 referrals to Day Treatment for Teens; 21 to Court-ordered Open Custody for teens; 164 to Intense In-home Family Support program (similar to Family preservation) for all ages, 17 to Residence for Child Welfare pre-teen living in Foster homes; 70 to Day treatment for pre-teens, 29 to Residence for pre-teens living with their families. '30 Agy' is the '....x.....x...' data line, for 10,270 recent referrals, from a cross-section of 30 other agencies
- The treatment programs have higher prevalence of scores >70 than the 30 agency average (x....x..) for all externalizing problems (particularly conduct), and usually more than 1 SD higher for Mood management, child functioning and family adjustment problems **Thus the current site appears to be accepting the more severe cases, as intended.**

7.2 Pre-Post scores for Adolescents Attending Open Custody (average age = 16.3)



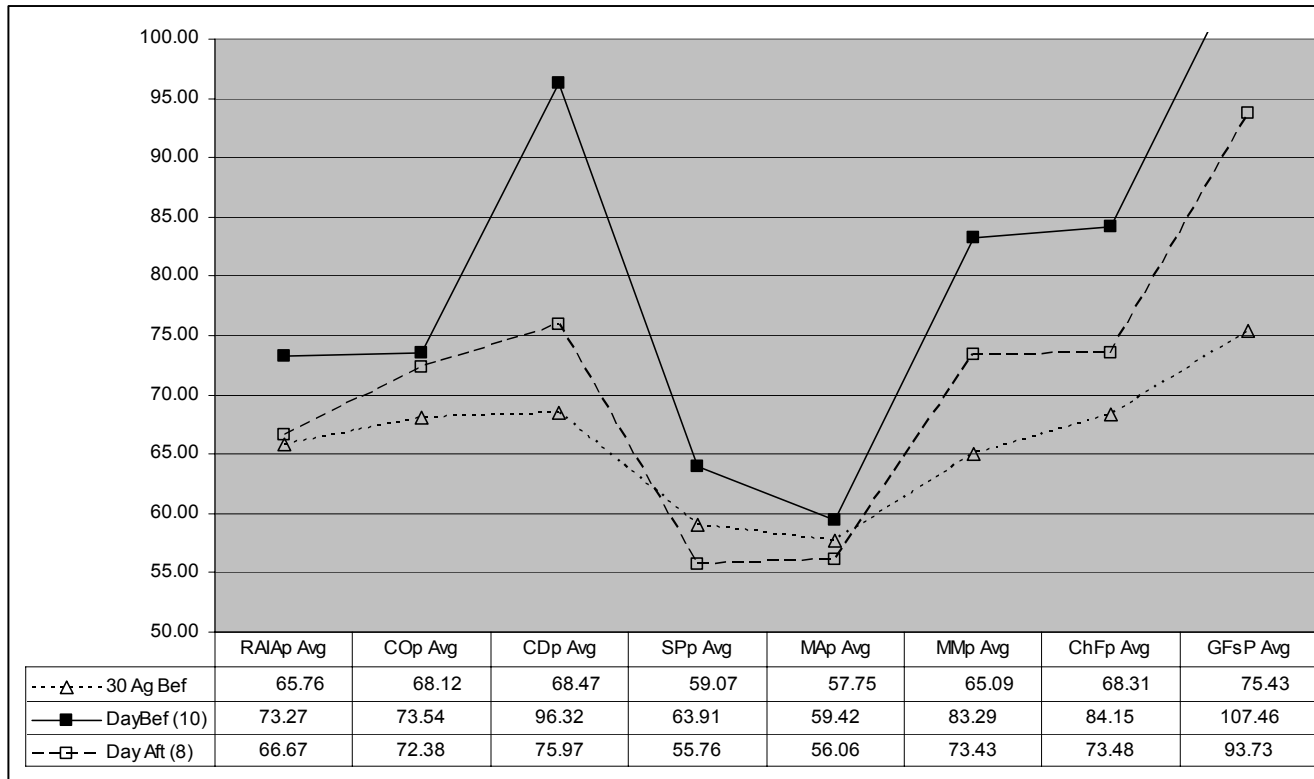
- These (court ordered) referrals to open custody (solid line) have noticeably higher severity than average referrals to 30 agency for Conduct, Child Functioning and Family maladjustment (Solid box vs triangles).
- Average mental health 'Before' scores which were >70 diminish by an average of 1.7 SD (RAIA, CD, MM) (solid box vs hollow box).
- There are minimal changes in Child functioning or Family adjustment, which remain above the average for routine CMH referrals
- Average discharge scores for 2 / 8 domains remained above the clinical threshold (vs 5 at admission) (Child functioning and family adjustment)

7.3 Pre-Post Scores for Cases Receiving Intensive in Home Family Interventions (Avg. age = 12.4 yr)



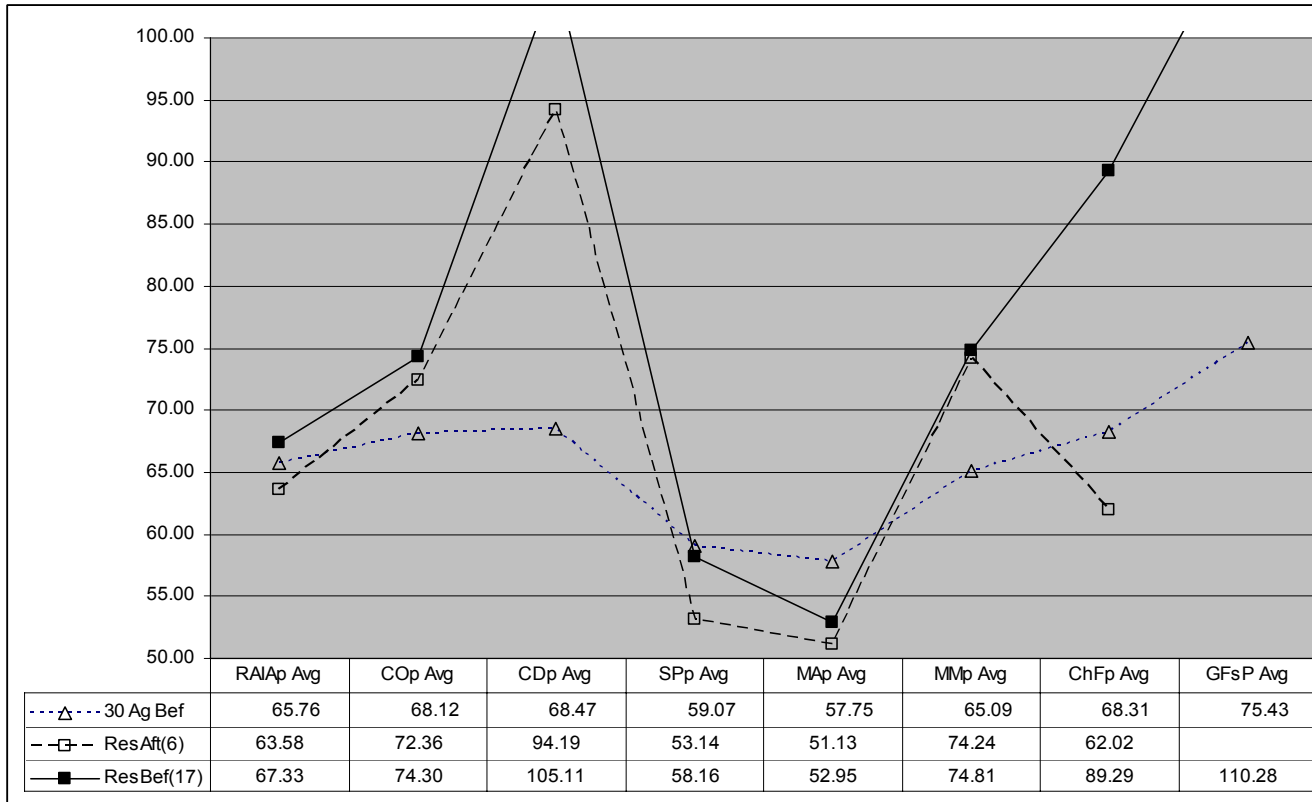
- The solid line 'Before' averages for 'In-home Bef are an average of 1.4 SD's higher than average for 30 agencies.
- The pre-post difference for 'Before' domains which start out above 70 is substantial, averaging 1.4 Standard deviations.
- This suggests a large effect size, if it can be replicated using valid sampling and matched-pair comparisons..

7.4 Pre-post Scores for Adolescents Attending Day Treatment (avg. age = 15.5)



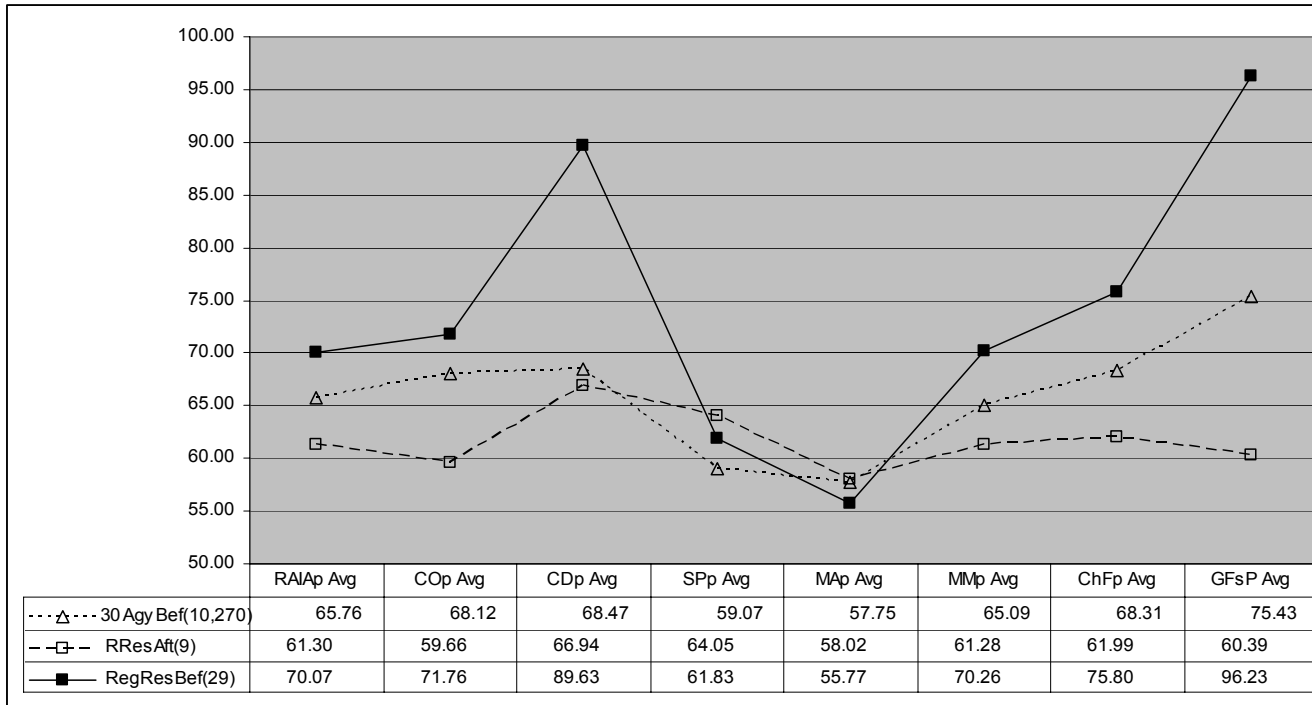
- Cases admitted to Day Treatment (solid line) have higher scores than average referrals for 30 agencies (average diff = 1.5 SD).
- Average pre-post change for pre scores > 70 = 1.34, a large difference,
- Average discharge scores for 5 / 8 domains remained above the clinical threshold (vs 6 at admission)

7.5 Pre-Post Scores for Child Welfare Referrals Attending Residential Services (Average age = 12.5)



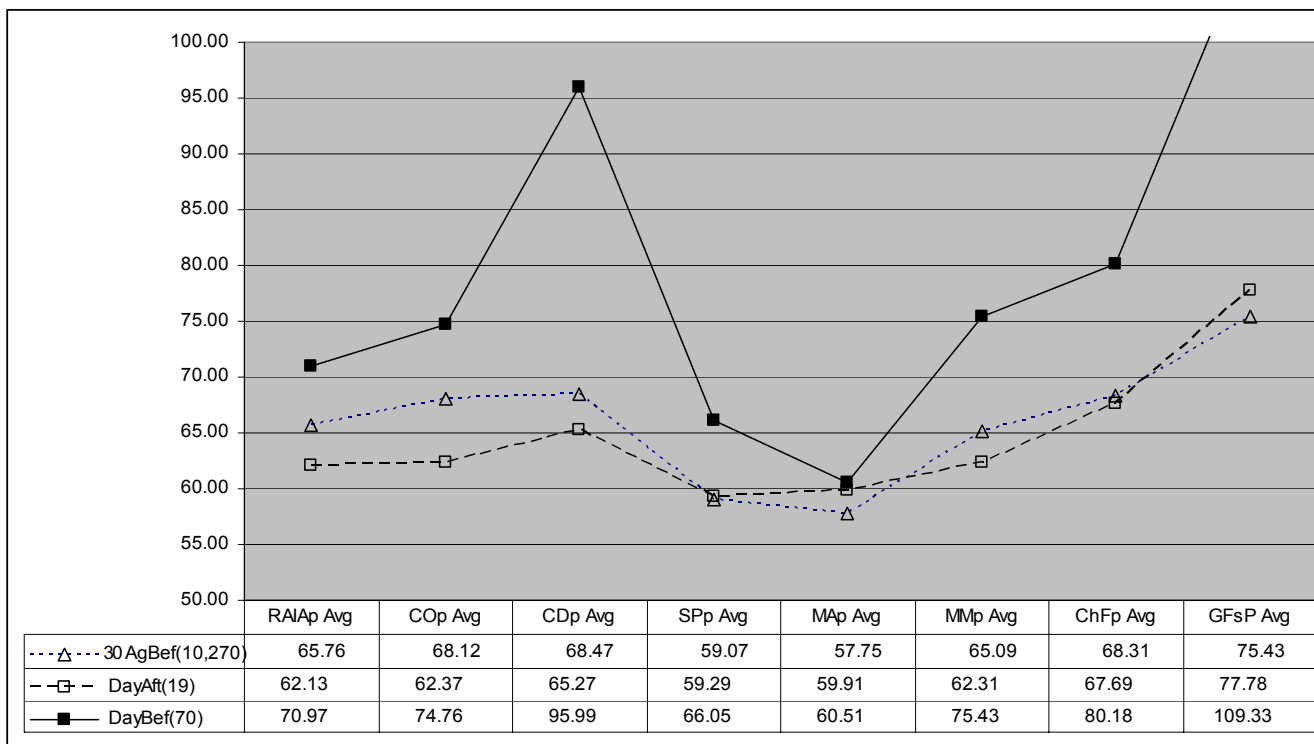
- Cases admitted to residence have higher scores (average difference = 1.3 SD; for Conduct = 3,6 SD) than average for 30 agencies.
- Average pre-post change for 4 pre scores > 70 = 1.0, a large difference.
- Main changes are in Conduct (1.1 SD) and Child functioning (2.7 SD).
- Average conduct, while reduced by 1.1 SD remains high at 95, as does Mood Management, unchanged at 74.
- Average discharge scores for 3 / 7 domains remained above the clinical threshold (vs 5 / 8 at admission).

7.6 Pre-post Scores for Family Referrals Attending Residential Services (Average age = 11.0 yrs)



- Cases (living with parents) admitted to residence) have higher scores (average difference = 0.8 SD; for Conduct = 2.1 SD) than average for 30 agencies
- Average pre-post change for pre scores > 70 = 1.7, a very large difference.
- Main changes are in all externalizing areas, Mood management, child and family functioning.
- All 'post' scores were below the threshold; most were between 60 and 65.

7.7 Pre-post Scores for Pre-Teens Attending Day Treatment (average age = 11.5)



- Cases admitted to pre-teen Day treatment have higher scores (average difference = 1.3 SD; for Conduct = 3.6 SD) than average referral score for 30 agencies.
- Average pre-post change for pre scores > 70 = 1.8, a very large difference.
- Average discharge scores were well below the '70' threshold', except for family adjustment, which dropped from 109 to 77.