

Performance Outcomes Report

The ABC Program

Therapeutic Behavioral Services (TBS)

(SAMPLE REPORT)

For Services Delivered During the Period of:

January 1, 2009 to June 30, 2009

Performance Outcomes Report

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Performance Outcomes Report

EXECUTIVE SUMMARY & USE OF THIS REPORT

A primary objective of the ABC Program's Therapeutic Behavioral Services (TBS) is to assess treatment effectiveness across time, with the goal of steadily improving service delivery from one report period to the next. In order to monitor treatment effectiveness, appropriate measures and targeted outcomes have been selected and are described in detail in this document. This report is generated once per year for review by the Board of Directors and other key personnel.

A best practices approach suggests that one or more outcomes contained in this report be selected and discussed in an upper management or Board of Directors meeting. Following this discussion, an action plan will be developed with the goal of improving the selected outcome(s). Data contained in subsequent reports will be used to determine if the action plan was successful in improving the targeted outcome(s) and revisions to the plan will be made as needed.

The contents of this report are based on information collected on a total of 62 clients (38 clients currently receiving TBS services and 24 clients whose cases have been closed) between January 1, 2009 and June 30, 2009.

Demographics (Current Clients):

Twenty-six new cases were open during this review period. As of December 31, 2008, there were a total of 38 children and adolescents receiving TBS services.

The average age for the 38 currently open TBS cases is 11.2 (down from 11.8 in the prior review period), with an age range of 4 – 18. With respect to gender, half of the clients (50.0%) are female. The largest percentage of clients are African-American (47.4%), followed by Caucasian clients (26.3%). The majority of open cases are dependents (66.7%; up from 61.5%), followed by clients receiving services privately (30.3%). Thirty-six of the 38 clients receiving services have a clinical diagnosis available at the time services were initiated. The most common diagnosis is Posttraumatic Stress Disorder (11 clients, 30.6%), followed by 4 clients each (13.8%) with a diagnosis of Adjustment Disorder, Attention Deficit Disorder, Disruptive Behavior Disorder, or Oppositional Defiant Disorder. Risk factors identified prior to service delivery include runaway behavior for eleven of the clients (29.0%), physical restraint or seclusion for twelve of the clients (31.6%), and a history of psychiatric hospitalization for twelve of the clients (31.6%).

Performance Outcomes:

Discharges:

During the period from January 1, 2009 to June 30, 2009, there were a total of 24 TBS clients discharged from the program. Among these, 12 cases (50.0%) were closed during this review period in a planned way (mutual agreement, treatment goals reached or partially reached), down from 90.0% in the prior review period. Six cases (25.0%) was closed in an unplanned way due to unmanageable client behavior (e.g., the client ran away), up from 3.3% in the prior review period. Six cases (25.0%) were closed in an unplanned way unrelated to client behavior (e.g., the client moved out of the service area), up from 6.7% in the prior review period. The overall average duration of service for all TBS cases that were closed during this review period was 177 days (down from 191 days in the prior review period), with a range of 17 - 445 days.

Behavioral Outcome Measures

Please note that the scores described in this section are obtained by combining (aggregating) the current review period and the previous review periods to boost the overall sample size. In general, there are not enough discharges in a given review period to provide an adequate sample size for statistical comparison. Aggregating scores across time, therefore, allows for a more meaningful assessment of clinical improvement.

Additionally, the sample must be split between planned and unplanned discharges and the two groups must be analyzed separately. Research has shown that clients who exit treatment in a planned way tend to show favorable behavioral and functional changes over the course of treatment, whereas clients who exit in an unplanned way tend to demonstrate no change or a slight worsening of functioning (which is why agencies measure the percentage of planned discharges as a performance outcome and strive to increase this percentage across time).

What does it mean when something is statistically significant? In statistics, a result that is statistically significant is one that is unlikely to have occurred by chance alone. When comparing changes in a client's behavioral or other scores from admission to discharge, it is important to know whether the change is such that it is unlikely to have occurred on its own, i.e., that the change was more likely due to the services the client received while in treatment. *What does effect size refer to?* Whereas statistical significance (a paired samples *t*-test) tells us that a change in scores is unlikely due just to chance, effect size (Cohen's *d*) is an analysis that tells us the magnitude of the change and its clinical importance, generally reported as either negligible, small, medium, large, very large, or extremely large. If changes in scores do not reach a point of statistical significance, agencies should strive to achieve this in future reports. If changes reach a point of statistical significance but effect size is negligible or small, efforts should be made to increase scores to achieve an effect size of medium or greater.

1. Child & Adolescent Functional Assessment Scale (CAFAS)

The CAFAS assesses levels of child impairment on eight subscales: School/Work Role Performance, Home Role Performance, Community Role Performance, Behavior Toward Others, Moods/Emotions, Self-Harmful Behavior, Substance Use, and Thinking. Higher scores represent greater dysfunction.

Among planned discharges, all eight CAFAS scores (up from seven in the prior review period) demonstrate clinical improvement to the point of statistical significance ($p < .05$): School/Work Performance, Home Performance, Community Performance, Behavior Towards Others, Moods/Emotions, Self-Harmful Behavior, Substance Abuse, and Thinking as well as the Total CAFAS Score (probably the best overall measure of clinical change). On average, there was a 35 point drop in impairment, from a CAFAS total score of 97 at intake and to an average total score of 62 at discharge. In addition to being statistically significant, this amount of change has a practical, clinical significance as reflected by an effect size of .96, which would be considered a *large* treatment effect. This is a highly favorable performance outcome. As would be expected, none of the CAFAS scores among unplanned discharges reached a point of statistical significance, although six of the scores were in the expected direction (lower), suggestive of some clinical improvement.

2. Global Assessment of Functioning Scale (GAF)

Changes in the overall level of client functioning from admission to discharge is assessed via the Global Assessment of Functioning (GAF) Scale. Scores on the GAF range from 1 to 100 where higher scores indicate superior functioning. Clients are rated on the GAF by a clinician who is familiar with the child's behavior.

For clients whose services were terminated in a planned way, changes in GAF scores from admission to discharge reached a point of statistical significance (an average score of 47 at admission to an average score of 56 at discharge), indicating overall functional improvement. In addition to being statistically significant, this amount of change indicates an effect size of .94, which would be considered a *large* treatment effect. Again, as would be expected, for clients whose services were terminated in an unplanned way, changes in GAF scores did not reach a point of statistical significance, although the change was in the expected direction (from an average score of 44 at admission to an average of 46 at discharge).

3. Changes in Family Functioning

The Family Functioning Scale consists of six items used to assess the quality of interaction between the client and parents or other primary caretakers. Scores range from 0 - 2, with higher scores indicating superior functioning. Rated items are averaged to produce a total Family Functioning Score, which has been shown to be highly associated with several child welfare outcomes (e.g., placement stability, planned discharge, behavioral gains in treatment, etc.).

For clients whose services were terminated in a planned way, three of the six measures on the Family Functioning Scale (the same as the prior review period) showed clinical improvement to the point of statistical significance: Problem Solving, Dealing with Stress/Conflict, and Parental Social Supports, as did with the Total Family Functioning Score (probably the best overall measure of clinical improvement). The Total Family Functioning Score increased from an average score of 1.2 at admission to a score of 1.4 at discharge. This indicates an effect size of .49, which would be considered a *medium* effect. Although the three remaining measures did not reach a point of statistical significance, the change was in the expected direction for two of them (higher), which is suggestive of clinical improvement. For clients whose services were terminated in an unplanned way, none of the measures on the Family Functioning Scale showed clinical improvement to the point of statistical significance, although two were in a favorable direction.

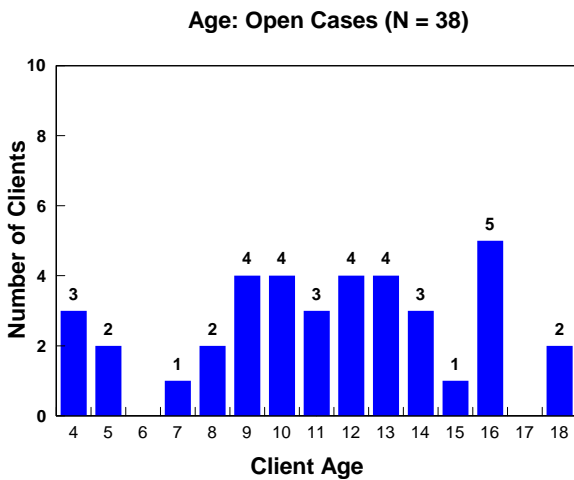
Performance Outcomes Report

This report is based on information collected on a total of 62 clients (38 clients currently receiving TBS services and 24 clients whose cases have been closed) between January 1, 2009 and June 30, 2009.

DEMOGRAPHICS – CURRENTLY OPEN CASES (AS OF DECEMBER 31, 2008)

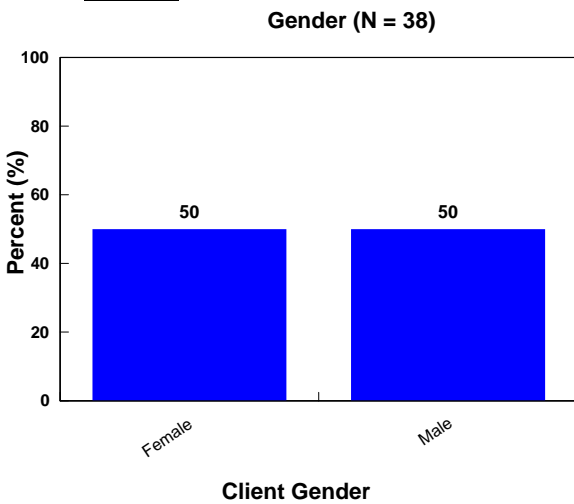
As of June 30, 2009, a total of 38 children and adolescents were receiving TBS services. Among these cases, 26 were opened during this review period. The following describes the demographic characteristics of all currently open cases.

1. Client Age



The average age for open cases is 11.2 (down from 11.8 in the prior review period), with an age range of 4 – 18.

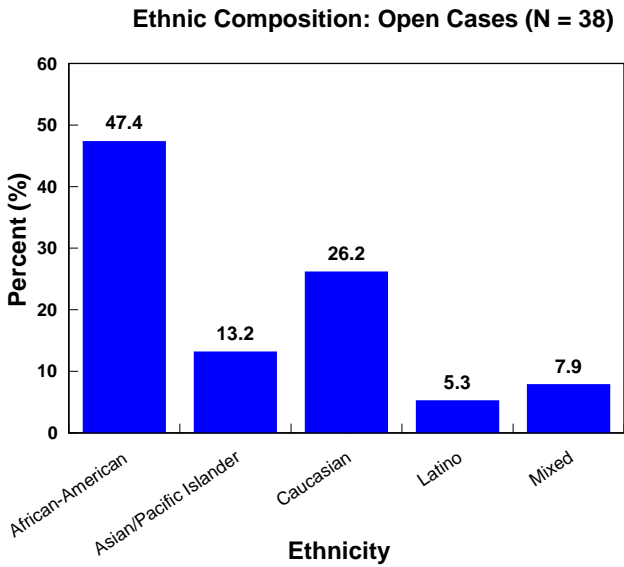
2. Gender



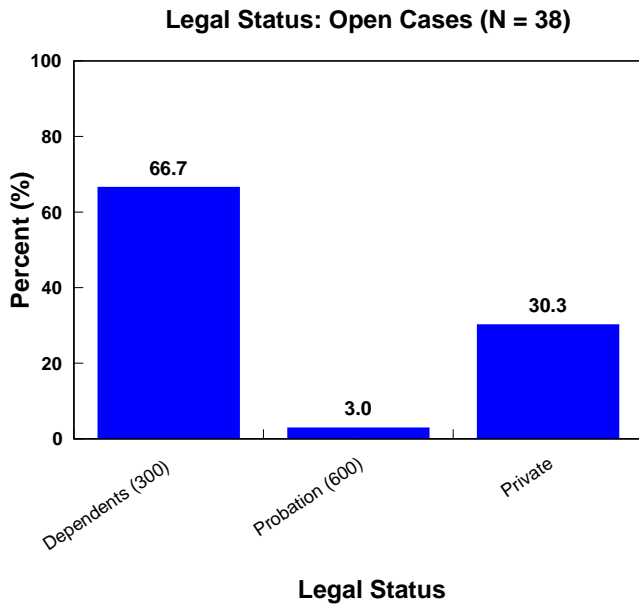
With respect to gender one half of the clients are female and one half are male.

3. Ethnicity

Psychological Assessment Systems, Inc.
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(530) 676-5380
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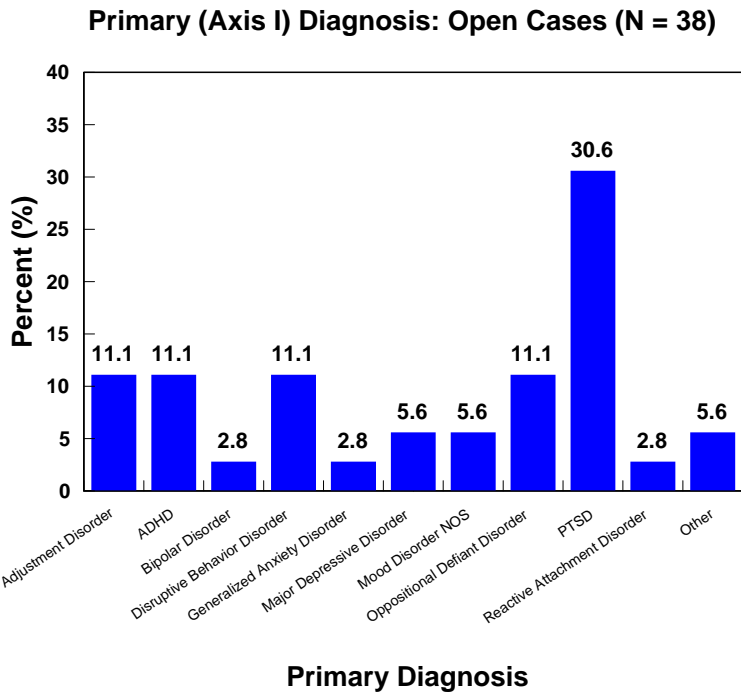


4. Legal Status



The majority of open cases are dependents (66.7%) up from 61.5% in the prior period, followed by clients receiving services privately (30.3%).

5. Clinical Diagnosis



Thirty-six clients receiving services have a clinical diagnosis available at the time services were initiated. The most common diagnosis is Posttraumatic Stress Disorder (11 clients, 30.6%), followed by 4 clients each (13.8%) with a diagnosis of Adjustment Disorder, Attention Deficit Disorder, Disruptive Behavior Disorder, or Oppositional Defiant Disorder.

6. Risk Factors Identified for Currently Open Cases

Runaway Behavior. Eleven of the clients (30.0%) have a history of running away from one or more settings. The average number of runaway episodes was six, with a range of 1 - 10. Among those clients with a runaway history, at least six have engaged in this behavior within the previous 12 months.

Physical Restraint and Seclusion. Twelve of the clients (31.6%) have a history of requiring physical restraint or seclusion prior to the initiation of service, and among those, at least ten have required its use within the previous 12 months.

Psychiatric Hospitalization. Twelve of the clients (31.6%) have a history of psychiatric hospitalization. The average number of hospitalizations was five, with a range of 1 - 10. Among those who were hospitalized, at least nine required its use in the previous 12 months.

In Summary:

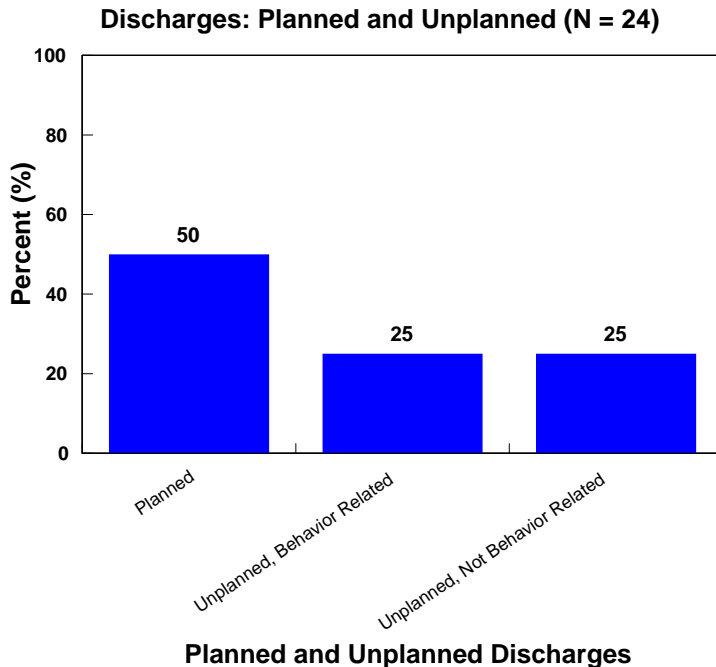
The average age for the 38 currently open TBS cases is 11.2 (down from 11.8 in the prior review period), with an age range of 4 – 18. With respect to gender, half (50.0%) of clients are female and half (50%) are male. The largest percentage of clients are African-American (47.4%), followed by Caucasian clients (26.2%). The majority of open cases are dependents (66.7%) up from 61.5% in the prior period, followed by clients receiving services privately (30.3%). Thirty-six clients receiving services have a clinical diagnosis available at the time services were initiated. The most common diagnosis is Posttraumatic Stress Disorder (11 clients, 30.6%), followed by 4 clients each (11.8%) with a diagnosis of Adjustment Disorder, Attention Deficit Disorder, Disruptive Behavior Disorder, or Oppositional Defiant Disorder. Risk factors identified prior to service delivery include runaway behavior for eleven of the clients (30.0%), physical restraint or seclusion for twelve of the clients (31.6%), and a history of psychiatric hospitalization for Twelve of the clients (31.6%).

PERFORMANCE OUTCOMES

Discharges

From January 1, 2009 to June 30, 2009, the program discharged 24 TBS clients. This section describes these discharge outcomes.

1. **Discharges: Planned and Unplanned**



With respect to discharges, 12 cases (50.0%) were closed during this review period in a planned way (mutual agreement, treatment goals reached or partially reached), down from 90.0% in the prior review period. Six cases (25.0%) was closed in an unplanned way due to unmanageable client behavior (e.g., the client ran away), up from 3.3% in the prior review period. Six cases (25.0%) were closed in an unplanned way unrelated to client behavior (e.g., the client moved out of the service area), up from 6.7% in the prior review period. The table that follows shows the reasons for discharge for each client.

Discharges

Planned/Unplanned	Reason for Discharge	Number (N)	Current Percent	Percent in Prior Review Period	Cumulative Percent To Date
Planned Discharges	Mutual agreement/treatment goals reached	9	37.5%	46.7%	43.7%
	Mutual agreement/treatment goals partially reached	3	12.5%	40.0%	23.0%
	Mutual agreement/treatment goals not reached	0	0%	3.3%	1.1%
Total TBS cases closed in a planned way:		12	50.0%	90.0%	67.8%
Unplanned Discharges/Behavior Related	Runaway; treatment goals partially reached	2	8.3%	0%	3.5%
	Runaway; no improvement	3	12.5%	0%	2.3%
	Client's behavior or psychiatric needs required a more restrictive setting	1	4.2%	0%	2.9%
	Client was incarcerated	0	0%	3.3%	4.0%
Total TBS cases closed in an unplanned way/behavior related:		6	25.0%	3.3%	12.7%
Unplanned Discharges/Not Behavior Related	Client moved out of the service area	4	16.7%	3.3%	12.1%
	Services terminated at the request of the client or	2	8.3%	0%	4.0%

Planned/Unplanned	Reason for Discharge	Number (N)	Current Percent	Percent in Prior Review Period	Cumulative Percent To Date
	parent/guardian				
	Other reasons	0	0%	3.3%	3.4%
Total TBS cases closed in an unplanned way/not behavior related:		6	25.0%	6.7%	19.5%

3. Duration of Service: Closed Cases

The average duration of service for the 12 cases that closed in a planned way was 219 days (up from 203 days in the prior review period), with a range of 88 – 445 days. The average duration of service for the 12 unplanned discharges was 134 days (up from 86 days), with a range of 17 - 351 days. The overall average duration of service for all TBS cases that were closed during this review period was 177 days (down from 191 days in the prior review period), with a range of 17 - 445 days.

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During the period from January 1, 2009 to June 30, 2009, there were a total of 24 TBS clients discharged from the program. Among these, 12 cases (50.0%) were closed during this review period in a planned way (mutual agreement, treatment goals reached or partially reached), down from 90.0% in the prior review period. Six cases (25.0%) were closed in an unplanned way due to unmanageable client behavior (e.g., the client ran away), up from 3.3% in the prior review period. Six cases (25.0%) were closed in an unplanned way unrelated to client behavior (e.g., the client moved out of the service area), up from 6.7% in the prior review period. The overall average duration of service for all TBS cases that were closed during this review period was 177 days (down from 191 days in the prior review period), with a range of 17 - 445 days.

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What does it mean when something is statistically significant? In statistics, a result that is statistically significant is one that is unlikely to have occurred by chance alone. When comparing changes in a client's behavioral or other scores from admission to discharge, it is important to know whether the change is such that it is unlikely to have occurred on its own, i.e., that the change was more likely due to the services the client received while in treatment. What does effect size refer to? Whereas statistical significance (a paired samples *t*-test) tells us that a change in scores is unlikely due just to chance, effect size (Cohen's *d*) is an analysis that tells us the magnitude of the change and its clinical importance, generally reported as either negligible, small, medium, large, very large, or extremely large. If changes in scores do not reach a point of statistical significance, agencies should strive to achieve this in future reports. If changes reach a point of statistical significance but effect size is negligible or small, efforts should be made to increase scores to achieve an effect size of medium or greater.

1. Child & Adolescent Functional Assessment Scale (CAFAS)

The CAFAS assesses levels of child impairment on eight subscales: School/Work Role Performance, Home Performance, Community Role Performance, Behavior Towards Others, Moods/Emotions, Self-Harmful Behavior, Substance Use, and Thinking. *Higher scores represent greater dysfunction.*

Each subscale is broken down into four increments:

- 00 – minimal or no impairment
- 10 – mild impairment
- 20 – moderate impairment
- 30 – severe impairment

The Total CAFAS score assesses a child's overall level of impairment:

- 0-10 – child exhibits no noteworthy impairment
- 20-40 – child likely can be treated on an outpatient basis, provided that risk behaviors are not present
- 50-90 – child may need additional services beyond outpatient care
- 100-130 – child likely needs care which is more intensive than outpatient and/or which includes multiple sources of supportive care
- 140 & higher – child likely needs intensive treatment, the form of which would be shaped by the presence of risk factors and the resources available within the family and the community

Changes in CAFAS Scores Admission to Discharge

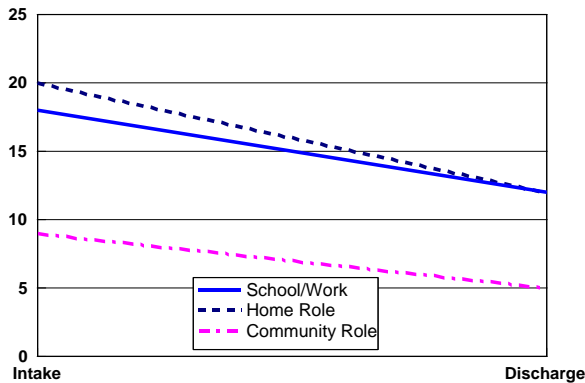
(NOTE: Negative changes in scores (decreases) indicate clinical improvement; positive changes indicate a worsening of functioning.)

	Planned Discharges (N = 98)			Unplanned Discharges (N = 44)		
	Intake	Discharge	Statistically Significant?	Intake	Discharge	Statistically Significant?
School/Work Performance	18	12	Yes	20	20	No
Home Performance	20	12	Yes	21	20	No
Community Performance	9	5	Yes	12	11	No
Behavior Toward Others	17	10	Yes	18	18	No
Moods/Emotions	17	12	Yes	20	19	No
Self-Harmful Behavior	6	4	Yes	10	9	No
Substance Use	3	2	Yes	4	5	No
Thinking	6	5	Yes	9	10	No
Total CAFAS	97	62	Yes	114	111	No

*Statistical significance is determined via a paired samples t-test with a p value of < .05.

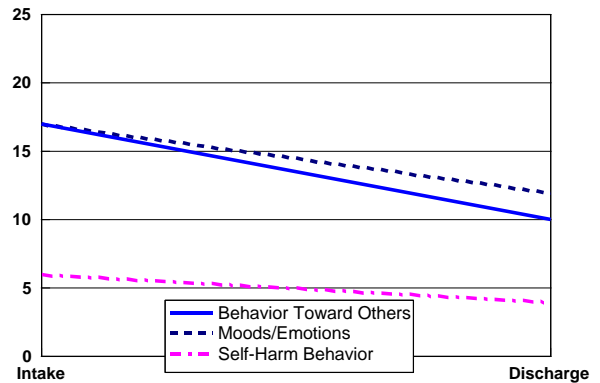
Planned Discharges

Planned Discharges: Intake to Discharge CAFAS Scores

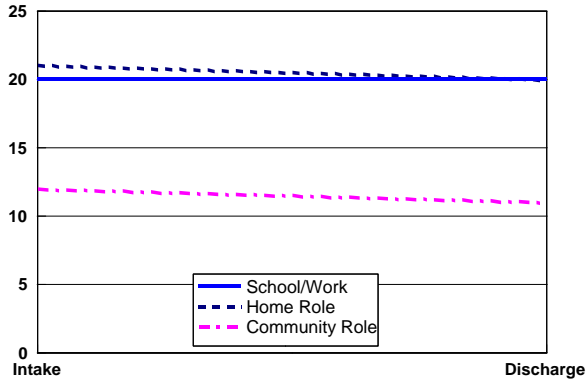


Unplanned Discharges

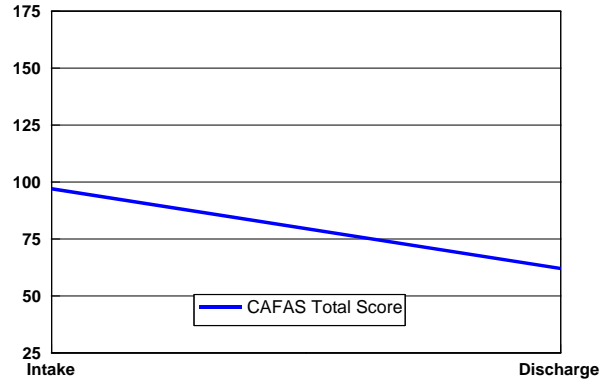
Unplanned Discharges: Intake to Discharge CAFAS Scores



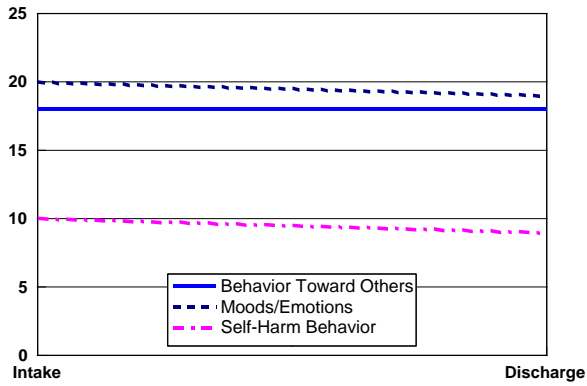
Unplanned Discharges: Intake to Discharge
CAFAS Scores



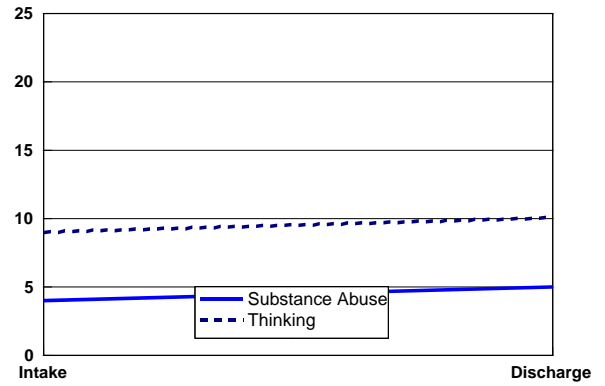
Planned Discharges: Intake to Discharge
CAFAS Scores



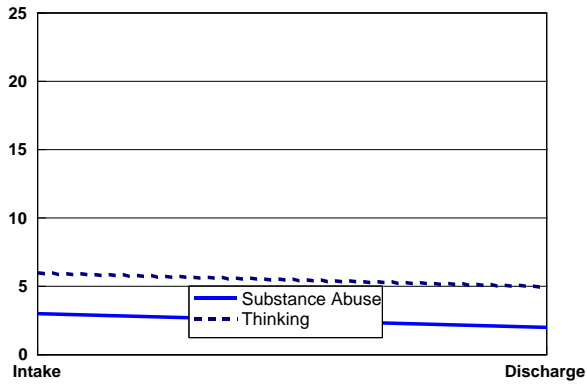
Unplanned Discharges: Intake to Discharge
CAFAS Scores



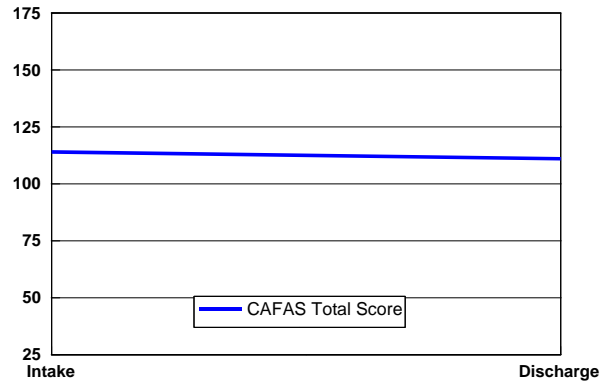
Unplanned Discharges: Intake to Discharge
CAFAS Scores



Planned Discharges: Intake to Discharge
CAFAS Scores



Unplanned Discharges: Intake to Discharge
CAFAS Scores



In Summary:

Among planned discharges, all eight CAFAS scores demonstrate clinical improvement to the point of statistical significance ($p < .05$): School/Work Performance, Home Performance, Community Performance, Behavior Towards Others, Moods/Emotions, Self-Harmful Behavior, Substance Abuse, and Thinking as well as the Total CAFAS Score (probably the best overall measure of clinical change). On average, there was a 35 point drop in impairment, from a CAFAS total score of 97 at intake and to an average total score of 62 at discharge. In addition to being statistically significant, this amount of change has a practical, clinical significance as reflected by an effect size of .96, which would be considered a *large* treatment effect. This is a highly favorable performance outcome. As would be expected, none of the CAFAS scores among unplanned discharges reached a point of statistical significance, although four of the scores were in the expected direction (lower), suggestive of some clinical improvement.

2. Global Assessment of Functioning Scale (GAF)

Changes in the overall level of client functioning from admission to discharge is assessed via the Global Assessment of Functioning (GAF) Scale. *Scores on the GAF range from 1 to 100 where higher scores indicate superior functioning.* Clients are rated on the GAF by a staff member who is familiar with the child's behavior.

<u>Score Range</u>	<u>Functional Description</u>
100 - 91	Superior functioning in a wide range of activities
90 - 81	Absent or minimal symptoms
80 - 71	No more than slight impairment in functioning
70 - 61	Some mild symptoms
60 - 51	Moderate symptoms
50 - 41	Serious symptoms
40 - 31	Some impairment in reality testing or communication or major impairment in several areas
30 - 21	Inability to function in almost all areas
20 - 11	Some danger of hurting self or others
10 - 1	Persistent danger of hurting self or others

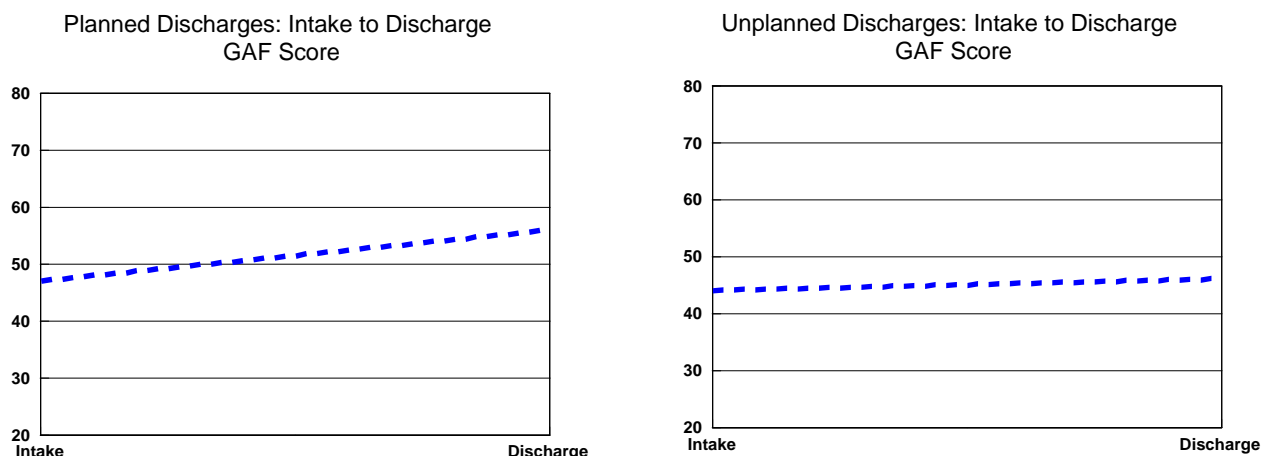
Changes in GAF Scores Admission to Discharge

(NOTE: Positive changes in scores (increases) indicate clinical improvement; negative changes indicate a worsening of functioning.)

	Planned Discharges (N = 82)				
	Intake	Discharge	Change	p value	Statistically Significant?*
GAF Score	47	56	+9	<.001	Yes

	Unplanned Discharges (N = 26)				
	Intake	Discharge	Change	p value	Statistically Significant?*
GAF Score	44	46	+2	.19	No

*Statistical significance is determined via a paired samples t-test with a *p* value of < .05.



In Summary:

For clients whose services were terminated in a planned way, changes in GAF scores from admission to discharge reached a point of statistical significance (an average score of 47 at admission to an average score of 56 at discharge), indicating overall functional improvement. In addition to being statistically significant, this amount of change indicates an effect size of .94, which would be considered a *large* treatment effect. Again, as would be expected, for clients whose services were terminated in an unplanned way, changes in GAF scores did not reach a point of statistical significance, although the change was in the expected direction (from an average score of 44 at admission to an average of 46 at discharge).

3. Changes in Family Functioning

The Family Functioning Scale consists of six items used to assess the quality of interaction between the client and parents or other primary caretakers. *Scores range from 0 - 2, with higher scores indicating superior functioning.*

The six items rated are:

- Problem solving
- Dealing with stress and conflict
- Parental and family conflict
- Parental social supports
- Parenting skills and physical discipline
- Involvement in case planning

Rated items are averaged to produce a total Family Functioning Score, which has been shown to be highly associated with several child welfare outcomes (e.g., placement stability, planned discharge, behavioral gains in treatment, etc.).

Note: Clients with no primary caretakers (e.g., deceased, incarcerated, whereabouts unknown, etc.) are omitted from analysis.

Changes in Family Functioning Scores from Admission to Discharge

(NOTE: Positive changes in scores (increases) indicate functional improvement; negative changes indicate a worsening of functioning.)

Planned Discharges (N = 54):

Area of Family Functioning	Intake	Discharge	Statistically Significant?*
Problem solving	.9	1.3	Yes
Dealing with stress/conflict	.9	1.3	Yes
Parental and family conflict	1.2	1.2	No
Parental social supports	1.3	1.5	Yes
Parenting skills and discipline	1.6	1.6	No
Involvement in case planning	1.3	1.4	No
Total Family Functioning Score	1.1	1.4	Yes

*Statistical significance is determined via a paired samples t-test with a *p* value of < .05.

Unplanned Discharges (N = 26):

Area of Family Functioning	Intake	Discharge	Statistically Significant?*
Problem solving	.7	.7	No
Dealing with stress/conflict	.9	1.0	No
Parental and family conflict	1.0	.7	Yes**
Parental social supports	1.2	1.1	No
Parenting skills and	1.3	1.3	No

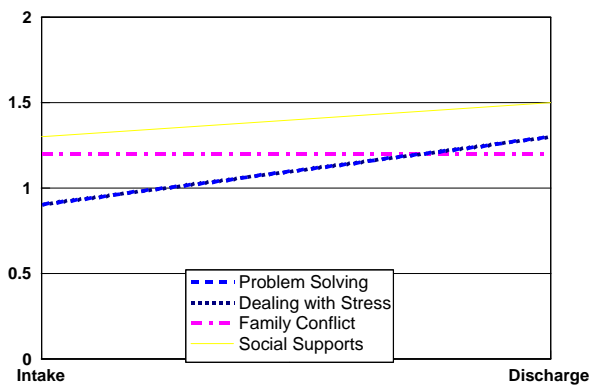
discipline			
Involvement in case planning	1.4	1.2	No
Total Family Functioning Score	1.1	1.0	No

*Statistical significance is determined via a paired samples t-test with a p value of $< .05$.

**This change indicates a worsening of functioning from admission to discharge.

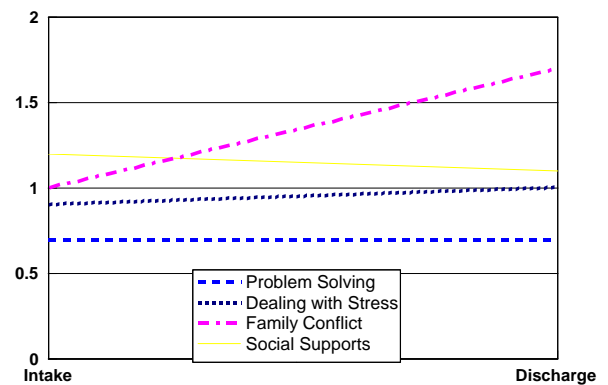
Planned Discharges

Planned Discharges: Intake to Discharge Family Functioning Scores

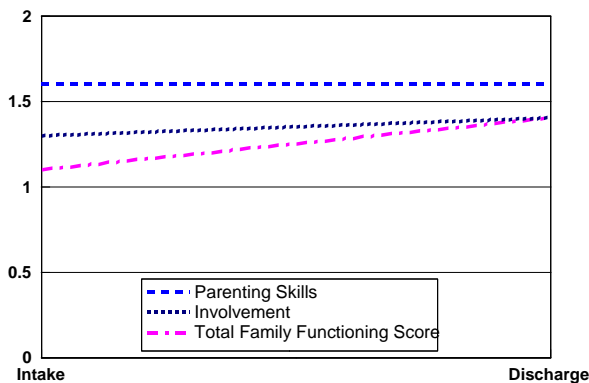


Unplanned Discharges

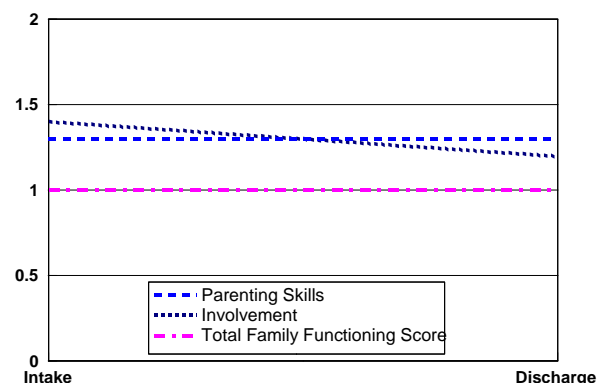
Unplanned Discharges: Intake to Discharge Family Functioning Scores



Planned Discharges: Intake to Discharge Family Functioning Scores



Unplanned Discharges: Intake to Discharge Family Functioning Scores



In Summary:

For clients whose services were terminated in a planned way, three of the six measures on the Family Functioning Scale showed clinical improvement to the point of statistical significance: Problem Solving, Dealing with Stress/Conflict, and Parental Social Supports, as did with the Total Family Functioning Score (probably the best overall measure of clinical

improvement). The Total Family Functioning Score increased from an average score of 1.1 at admission to a score of 1.4 at discharge. This indicates an effect size of .58, which would be considered a *medium* effect. Although the three remaining measures did not reach a point of statistical significance, the change was in the expected direction for one of them (higher), which is suggestive of clinical improvement. For clients whose services were terminated in an unplanned way, none of the measures on the Family Functioning Scale showed clinical improvement to the point of statistical significance, although one was in a favorable direction.