Excerpts from

An Examination of Intensive Family Preservation Services

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Results of the IFRS Program

The IFRS data from the six contributing sites contain case-level data on 332 families. The relative contributions of cases to the database are very similar to those of the IFPS data, although Missouri contributed only IFRS cases and Maryland contributed none (refer to Table 7). The contribution of IFRS cases from each state is: North Carolina, 52%; Washington, 26%; Missouri, 12%; and Colorado, Indiana and Pennsylvania combining for the remaining 10%. Among these 332 families, demographic data were available on 92% (305) of primary caregivers. Demographic data were available for at least one child in 91% (303) of families served by IFRS programs, with a total of 622 child records.

Table 7. Number (Percent) of IFRS Cases by State

State	Families N=332	Primary Caretakers N=305	Children N=622 (from 303 families)
Colorado	16 (4.8%)	15 (4.9%)	34 (5.5%)
Indiana	3 (0.9%)	3 (1.0%)	7 (1.1%)
Maryland	0 (0%)	0 (0%)	0 (0%)
Missouri	41 (12.3%)	30 (9.8%)	67 (10.8%)
North Carolina	171 (51.5%)	171 (56.1%)	354 (56.9%)
Pennsylvania	14 (4.2%)	14 (4.6%)	27 (4.3%)
Washington	87 (26.2%)	72 (23.6%)	133 (21.4%)

Demographics of IFRS Families

A summary of the IFRS demographic data are presented in Table 8. Age data were available for 79% of the primary caregivers in these families, with the mean age being 32 years, ranging from 16 to 74 years. Eighty two percent were female. Forty percent of caregivers were

single, 26% were married, 15% were in a domestic partnership, 2% were separated, and 15% were divorced.

Table 8. Demographics of IFRS Families

Family Demographics (N=332)	**Number**	**Percent**
Average Age	**261**	**78.6%**
	Min=16 Max=74	Mean=32.05
Gender	**303**	**91.3%**
Male	56	18.5%
Female	247	81.5%
Race	**300**	**90.4%**
White	171	57.0%
Black	102	34.0%
Other	27	9.0%
Hispanic	**17**	**6.5%**
Marital status	**125**	**37.7%**
Single	50	40.0%
Married	33	26.4%
Domestic Partnership	19	15.2%
Separated	3	2.4%
Divorced	19	15.2%
Widowed	1	0.8%
Employment status	**284**	**85.5%**
Full Time	99	34.9%
Part Time	25	8.8%
Seasonal/Intermittent	7	2.5%
Unemployed	105	37.0%
Homemaker	18	6.3%
Disabled	23	8.1%
Student	3	1.1%
Retired	4	1.4%
Substance Abuse	**303**	**91.3%**
None	190	62.7%
Alcohol Abuse Only	16	5.3%
Drug Abuse Only	68	22.4%
Alcohol and Drug Abuse	29	9.6%

Employment status was available for 86% of IFRS caregivers. Among this group 35% were employed full time, 9% were employed part time, 37% were unemployed, 6% were homemakers, 8% were disabled, and about 1% each were students or were retired.

Racial identity data were available for 90% of caregivers, and analysis reveals that 57% of IFRS caregivers were White, 34% were Black 34% were American Indian, 1% were multi-racial, and all other categories contributed less than 1%. About 7% of caregivers also identified themselves as being Hispanic.

Regarding substance use, 5% of caregivers were identified as having an alcohol-only problem, and 22% were identified as having a drugs-only problem. An additional 10% were identified as having a poly-substance problem, including alcohol. It is likely that substance use was a contributing factor in the removal of children in many of the IFRS families.

Between-State Differences on Family Demographics for IFRS Families

Among state cohorts of reunification cases, there are no gender differences as a function of state affiliation. There are racial differences, however, and the overall chi square analysis is significant (chi square = 167.87, df = 30, $p < .001$). Colorado was overwhelmingly White (84%). In Pennsylvania and Washington, Whites accounted for about three quarters of IFRS cases (71% and 75%, respectively). In Maryland and North Carolina, Whites accounted for about three fifths of cases (59% and 63%, respectively), and Indiana had only 32% Whites. In each case, Blacks made up the difference except in Colorado and Washington, which each had a small American Indian caseload (4% and 6%, respectively).

Among IFRS caregivers, 34% of North Carolinians were unemployed, 54% were unemployed in Pennsylvania, 36% were unemployed in Washington, and inexplicably, 69% of

Colorado's caregivers in IFRS cases were unemployed. Caution should be exercised, however, when interpreting these findings because small sample sizes among some reunification cohorts may yield unreliable data on this variable.

The same cautionary notes made prior in this report discussing the IFPS alcohol and drug data apply to the IFRS data. With those caveats in mind, there were no significant differences among states with respect to the number of alcohol-using caregivers in IFRS families, with rates ranging from 6% to 20% across states. There were significant differences in "other" drug use, with considerable variation among states. Colorado's data indicated a 93% "other drug use" rate among reunification families (although the sample is small, with an n=15). Indiana, Missouri, North Carolina and Pennsylvania had rates ranging from 30% to 33%, and Washington's rate was 17% (chi square = 33.9, df = 5, $p < .001$). There is no parsimonious explanation for these differences.

Demographics of IFRS Children

A summary of child demographics for IFRS children is presented in Table 9. Among reunification cases, 53% of children in IFRS families were male (and 47% female). Half (50%) were White, 34% were Black, and 9% were multi-racial. All other categories sum to only 7%. In addition to race, 8% of children were also identified as being Hispanic.

The primary problems that brought these IFRS/reunification children into care initially are not dissimilar from problems associated with IFPS/placement cases. For example, 13% of IFRS children were victims of physical abuse, 8% were sexually abused, 72% were neglected, and 25% were involved with family conflict. Related to the family conflict variable, 7% of IFRS children were engaged in delinquency and 19% were experiencing school problems/failure. The

Table 9. Demographics of IFRS Children

Child Demographics (N=622)	Number	Percent
Average Age	**520**	**83.6%**
	Min=0 Max=17	Mean=6.58
Gender	**584**	**93.9%**
Male	269	46.1%
Female	315	53.9%
Race/Ethnicity	**583**	**93.7%**
White	294	50.4%
Black	199	34.1%
Multi-Racial	51	8.7%
Other	39	6.7%
Hispanic	**40**	**7.7%**
Role in Family	**594**	**95.5%**
Identified Child	560	94.3%
Other Child	34	5.7%
Relationship to Primary Caregiver	**528**	**84.9%**
Child, Biological	498	94.3%
Child, Adoptive	2	0.4%
Child, Foster	5	0.9%
Grandchild	14	2.7%
Other Relative	6	1.1%
Non-Relative	0	0.0%
Guardianship	3	0.6%
Reasons for Referral		
Physical Abuse	79	13.4%
Sexual Abuse	48	8.2%
Neglect	425	72.3%
Family Conflict	147	25.0%
Beyond Parental Control	159	28.5%
Delinquency	38	6.8%
Truancy	32	7.5%
Other School Problem	106	19.0%
Other Child Behavior Problem	100	20.4%
Developmental Disability	47	8.4%
Child Mental Health Problem	29	14.2%
Alcohol/Substance Abuse	94	16.8%

slightly higher number of IFRS-neglect cases and the slightly lower number of family conflict cases may be related to reasons that some children are removed from home initially, although that line of inquiry cannot be pursued with these data.

Between-State Differences on Child Demographics for IFRS Children

Differences were noted, sometimes large differences, in the array of demographics and types of families and children served when individual state IFPS data were examined. The same is true to a somewhat lesser degree when IFRS data are examined. There were no differences among states with respect to gender of children served and relationship of children to their caregivers. There were, however, racial differences not unlike those of their caregivers. Colorado, for example had the highest proportion of White families (85%) and American Indian families (9%), and the lowest proportion of Black families (6%). The very high proportions of Black families in Indiana and Missouri data (86% and 70%, respectively) are likely attributable to the urban areas served by the provider agencies (questions about disproportionality notwithstanding). North Carolina was about evenly split among Black and White families (40% and 42%, respectively), and the proportion of White families in Washington's data was high (81%) but both Washington and North Carolina had large numbers of multiracial families (9% and 12%) compared to other states. However, not all states could identify multi-racial children. Without base-rates and knowledge of the representativeness of families in the database to the statewide distribution of cases, questions of disproportionality cannot be addressed.

As with IFPS cases, states also differed in their apparent predisposition to use IFRS in certain types of cases. For example, neither Colorado nor Indiana served any "physical abuse" families with their reunification programs. In contrast, 9% of North Carolina's IFRS families

were “physical abuse” cases, in Missouri, the proportion was 18% and in Washington, it was 28%. These differences are significant (chi square = 36.29, df = 4, $p < .001$); Pennsylvania could not report these data. Differences in the proportion of families being served in which sexual abuse had occurred were small, and not significant.

There were large differences with respect to IFRS services for families in which neglect had occurred. All of Colorado’s IFRS cases involved neglect (100%), a large majority of North Carolina IFRS cases involved neglect (90%), and the majority (52%) of Washington’s cases involved neglect. Only 3% of Missouri’s IFRS cases were for neglect. These differences are significant (chi square = 258.86, df = 4, $p < .001$).

Family conflict is differentially represented among the states, with Colorado and North Carolina each having 35% of cases associated with family conflict, and Washington having 9%. Missouri indicated 0%. These differenced are significant (chi square = 63.21, df = 4, $p < .001$). Other states did not provide data in sufficient quantity to test.

These analyses suggest that, like IFPS, states use their IFRS services to serve different types of families. However, participating states could not provide data about IFRS families to the same degree that they could for IFPS families, including numerous variables identifying different types of parent and child behavior. Thus, the degree to which generalizations can be made is less for IFRS than for IFPS, and additional research is necessary in this area of inquiry.

IFRS Service Delivery Information

Table 10 presents a summary of the service delivery information provided by participating programs. The average length of service for IFRS interventions was 143 days, or about 20½ weeks. Like IFPS, however, this average is undoubtedly influenced by the small

number of cases that run considerably longer than the stated average. Also, there is much more variability in the IFRS models, as reported by the cooperating agencies, than is true with the IFPS models.

Table 10. IFRS Service Delivery Information

IFRS Service Delivery Information (N=332)	Number	Percent
Average Days Open	**304**	**91.6%**
	Min=0 Max=1306	Mean=143.29
Reason for Case Closure	**262**	**78.9%**
Services Completed Successfully	133	50.8%
Failure to Cooperate or Family Withdrew	57	21.8%
Permanent Plan Changed	24	9.2%
Child Placement	9	3.4%
Family or Child Moved	2	0.8%
Service Period Ended	30	11.5%
Other Reason	7	2.7%
Were Step-Down Services Provided	**204**	**61.4%**
No	60	29.4%
Yes	144	70.6%

Case closure and other service data were available for 79% of the cases reported. Of those, just over half (51%) were successfully closed (that is, services were completed in accordance with the case plan). In 9% of cases, the permanent plan was changed at some point, and this usually means that reunification efforts have ceased and the agency is moving towards termination of parental rights. In about 22% of cases, more than double the number for IFPS cases, the family withdrew from services or stopped cooperating, normally resulting in a return of case management authority to the mandated child welfare agency (either the county or the state, depending upon administrative authority).

As was true with IFPS families, step-down services were offered in the large majority of cases (71%). Like IFPS cases, this number of families receiving step-down services indicates an

ongoing need for support in order to maintain the reunification beyond the more intensive service period provided by the IFRS agency.

IFRS and the NCFAS-R

Like the NCFAS and the IFPS data, the figures that follow display family assessment data on the reunification families. All workers assessing reunification families used the NCFAS-R, which comprised seven domains of family functioning. Figures 8 through 14 present the aggregate data for each individual domain, displaying the proportion of families rated as being at each level of family functioning at intake and at closure. Figure 15 presents the proportion of families rated as having experienced positive change, no change or negative change on each domain. Figure 16 presents the proportion of families rated as being at or above baseline at intake and closure. A more detailed description of the different presentation, as well as a discussion of how to view and interpret those schema, has been presented in the section on "IFPS and the NCFAS," and are not repeated here.

Figure 8 illustrates the distribution of families across the six NCFAS-R scale categories. At intake, slightly more than half (54%) of families are rated in the problem range of functioning. Nearly one-third (31%) are at the moderate or serious problem range. At closure, the total number of families in the problem range has been reduced to one-third (33%), and less than one-fifth (19%) remain at the moderate or serious levels. On the contrary, the proportion of families rated as having mild or clear strengths has doubled, rising from 20% to 39%.

Parental capabilities, illustrated in Figure 9, are a problem for large numbers of reunification families. Seventy percent of families are rated in the problem range at Intake, 44% at the moderate or serious problem levels. After IFRS services these proportions are lowered to

Figure 8. IFRS Environment Ratings at Intake and Closure

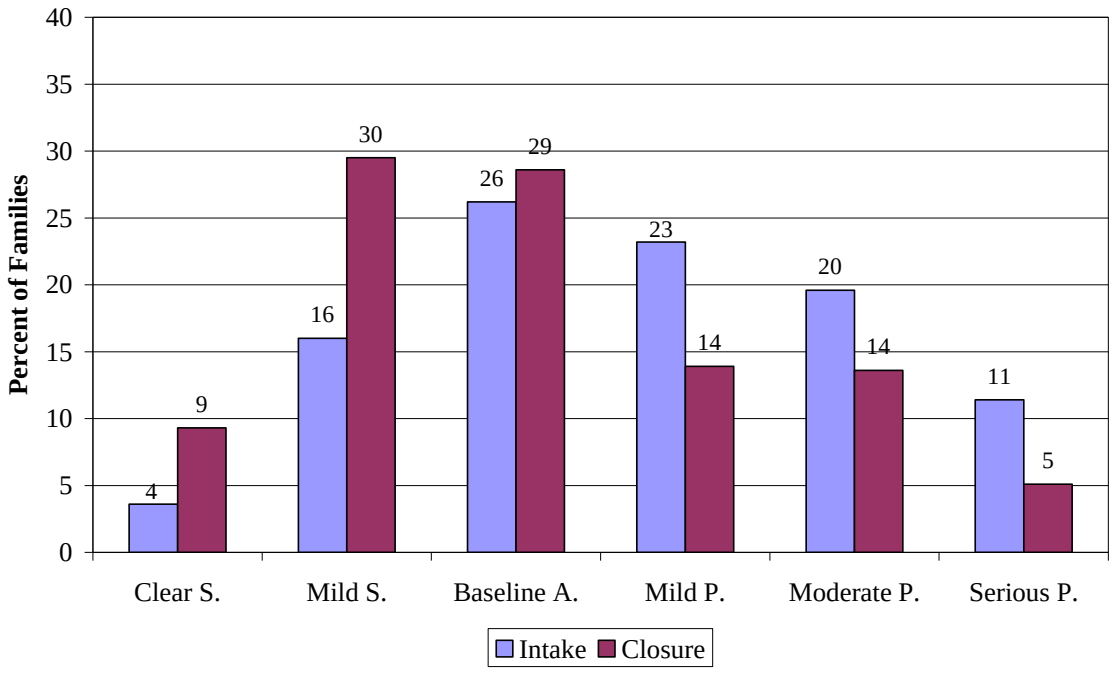
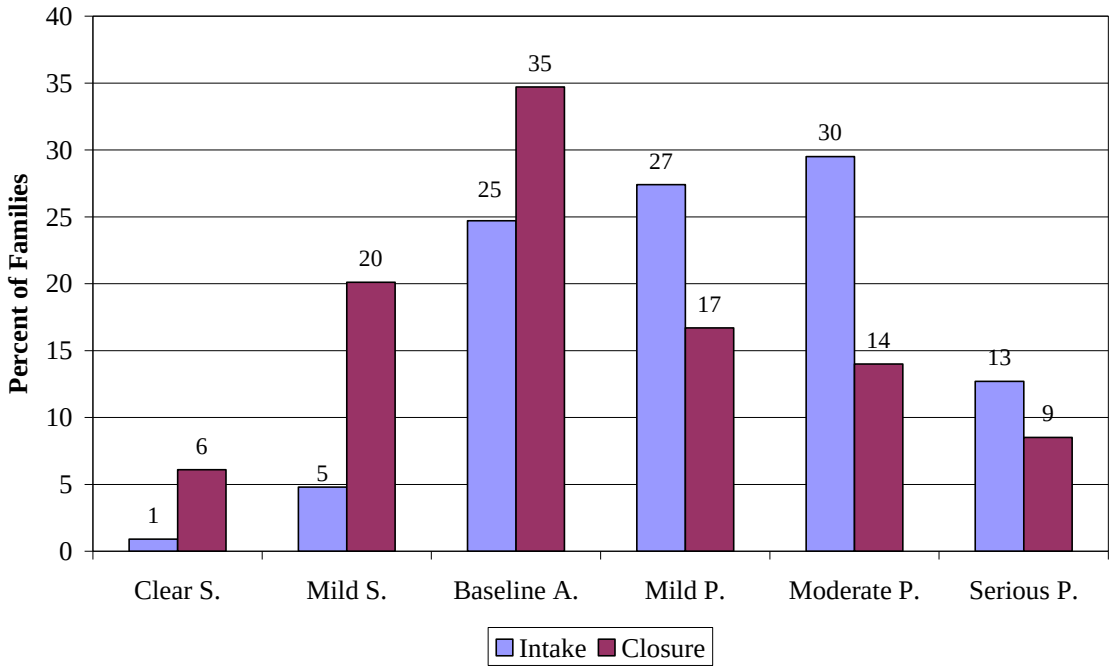


Figure 9. IFRS Parental Capabilities Ratings at Intake and Closure



25%, with only 9% reexamining at the serious problem level. The number of families rated as having mild or clear strengths has increased four fold, from 6%, combined, to 26%. This represents a dramatic shift among reunification families towards the strengths range of ratings for parental capabilities.

Figure 10 illustrates similar shifts for reunification families on the domain of family interactions. Fifty-five percent of families are rated in the problem range, 30% being at the moderate or serious problem levels, and only 15% are rated as having mild of clear strengths in this area. However, after IFPS services, only one third (33%) remains in the problem range, and only half of those families (17%) are rated at the moderate or serious problem levels. The proportion of families at the mild to clear strength levels more than doubles, reaching 34%.

Figure 10. IFRS Family Interactions Ratings at Intake and Closure

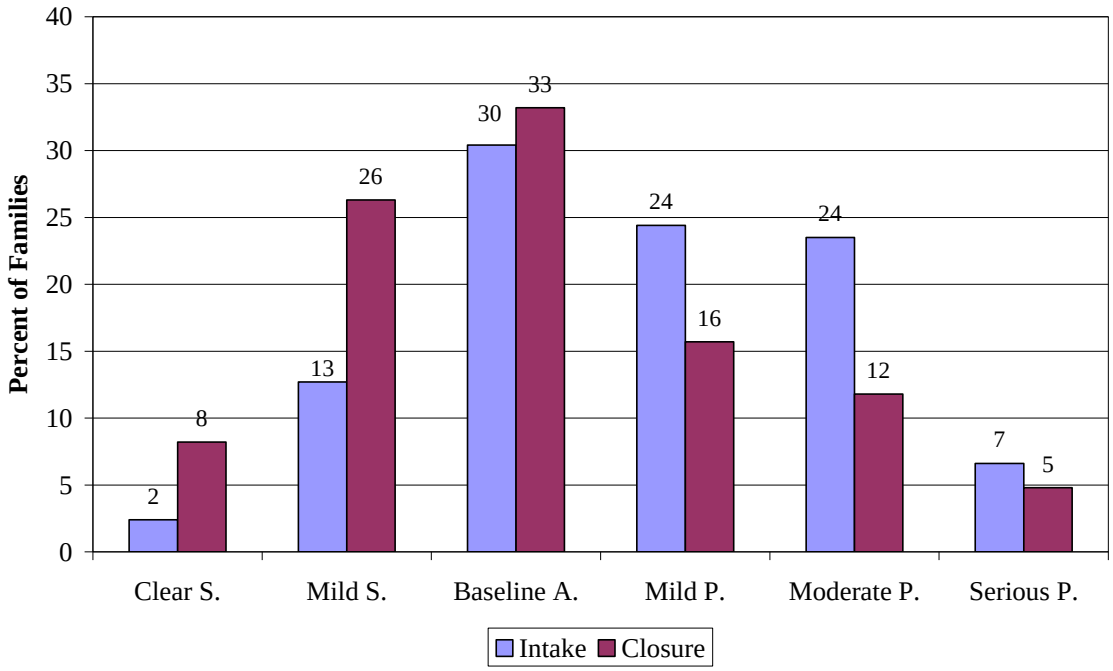


Figure 11. IFRS Family Safety Ratings at Intake and Closure

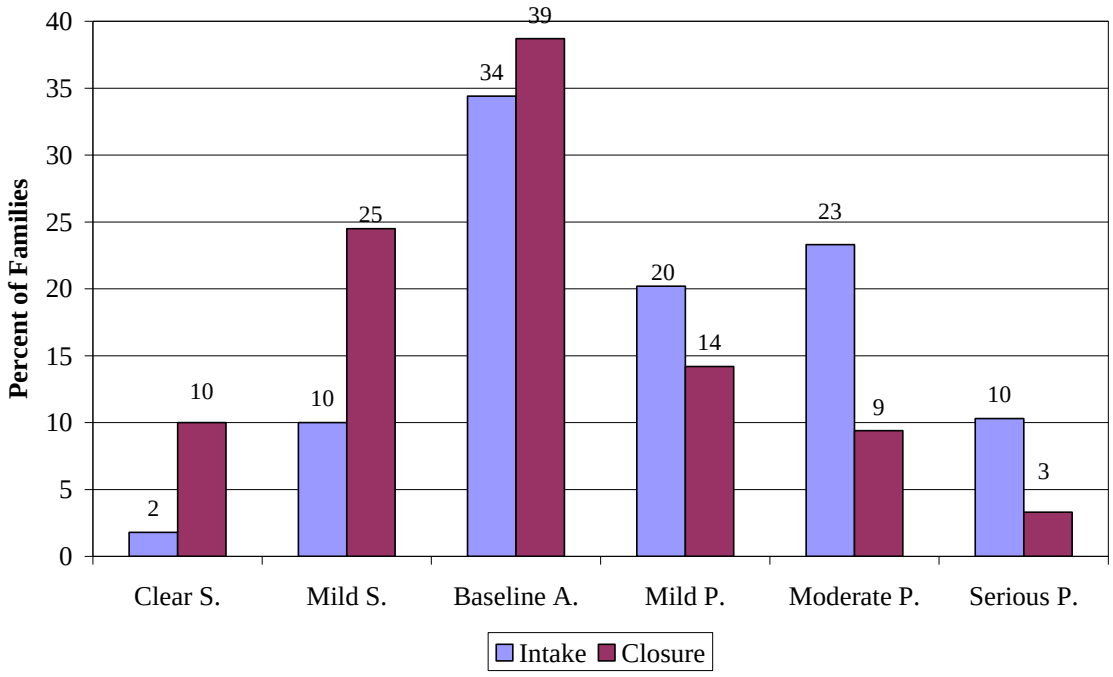
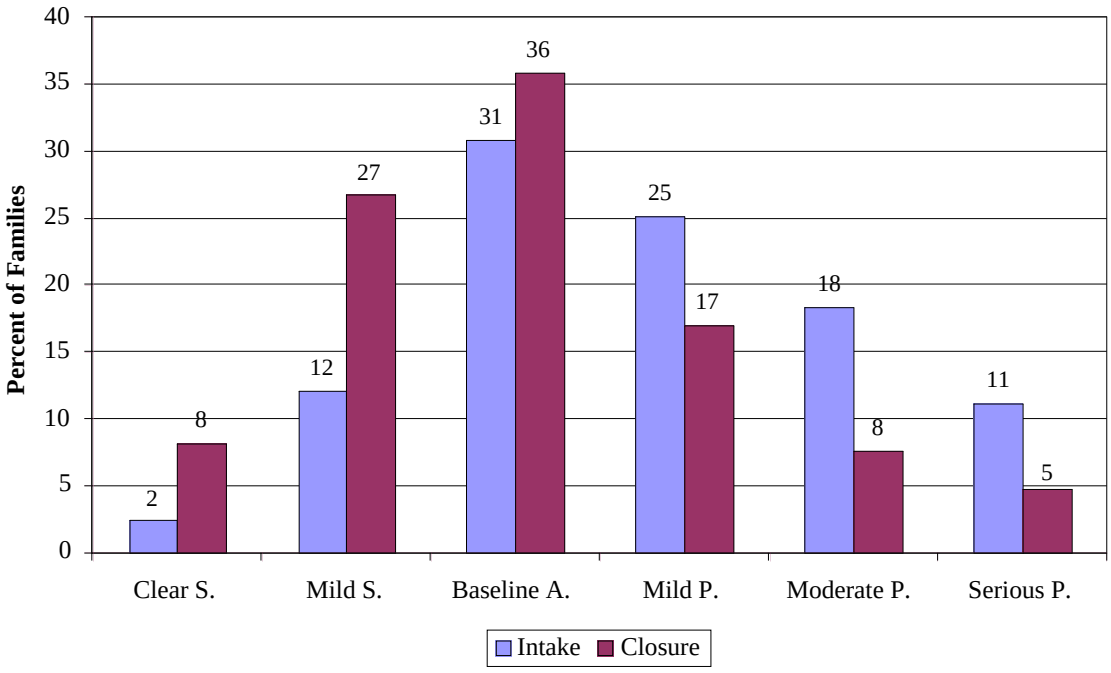


Figure 11 shows reductions in problem ratings relating to family safety. Whereas more than half (53%) of families enter IFRS services with problems on this domain, that number is lowered to just one quarter (26%), with only 12% at the moderate to serious problem levels. The proportion rated at the mild to clear strength levels tripled from 12% to 35%. Again, family safety, particularly child safety, is the paramount concern of IFPS and IFRS service models, and the dramatic reductions in problematic family safety ratings is a compelling service outcome.

Child well-being ratings are illustrated in Figure 12. More than half (54%) of families are rated in the problem rage of ratings at Intake. Only 14% of families are seen as having mild or clear strengths. However, by the time IFRS services close, more than 3 times that many (35%) are in the top two strength categories, 30% remain in the problem range, and only 13% at the moderate to serious problem levels.

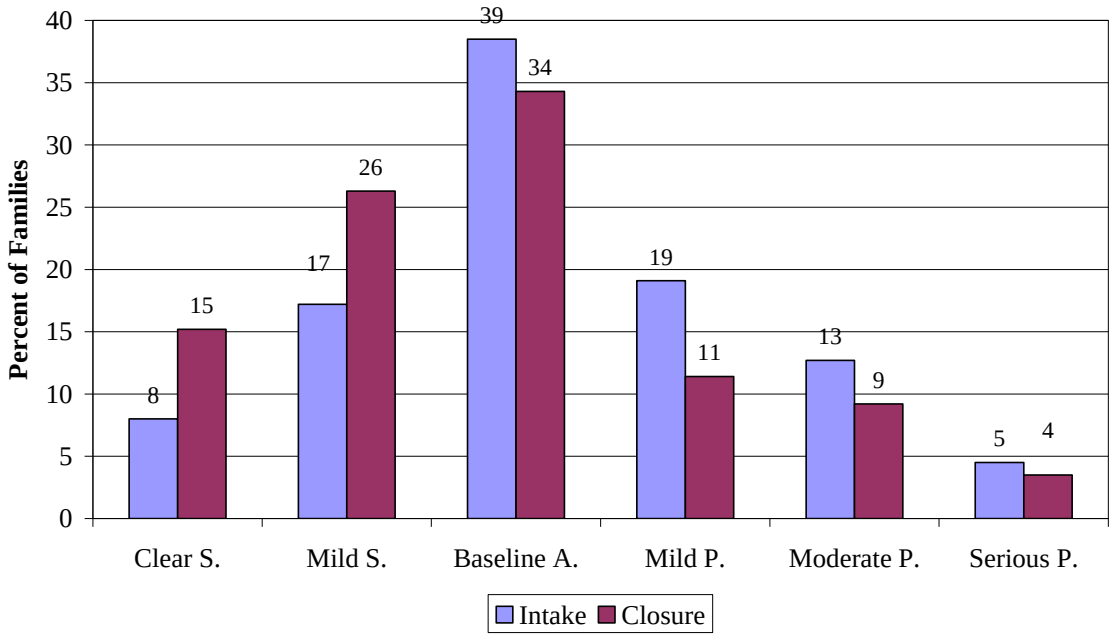
Figure 12. IFRS Child Well-Being Ratings at Intake and Closure



Figures 13 and 14 illustrate assessment ratings for the domains of ambivalence and readiness for reunification. Recall that these two domains were added to the NCFAS-R to tailor its content to include issues specific to reunification cases. The ratings on these two domains present slightly different arrays of ratings than the original five domains, when applied to reunification cases. In both cases (ambivalence and readiness for reunification) there seems to be slightly less progress made by families towards the strengths range of ratings, relative to the proportions at those ratings at Intake. The differences observed in the reunification families in this study are consistent with observations in previous research where the NCFAS-R has been used to structure assessments, particularly so for ambivalence.

The ambivalence data are presented in Figure 13. Note that 37% of families are rated as having ambivalence problems at intake, and only 18% are rated as having moderate or serious

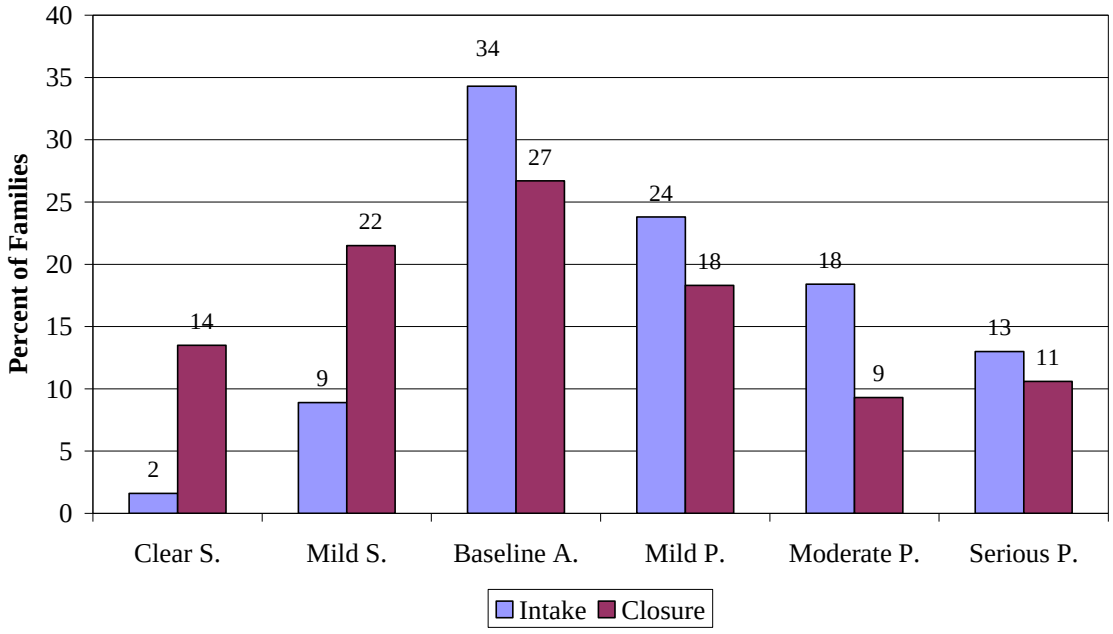
Figure 13. IFRS Caregiver/Child Ambivalence Ratings at Intake and Closure



problems at intake. However, nearly one quarter (24%) remain in the problem range of ratings at closure, and 13% are at the moderate or serious levels, down only 5% from the levels as intake. This apparent lack of movement suggests stagnation of families in the problem range of ratings. However, the data are in fact more dynamic, and the apparent stagnation of these ratings is a result of families moving in both directions on the domain. That is, there are a larger proportion of families moving toward the more negative ratings on this domain, relative to other domains presented to this point. Such is the nature of ambivalence: families tend not to want to admit to or acknowledge ambivalence prior to the return of the child, and in some families, ambivalence does not emerge until after the child has been returned. The result is an overall appearance of less movement of all families from the problems range of ratings towards the strength range: there is less room for movement to begin with, and there is more movement in both directions on this domain within reunification families. These assertions about the reasons for the apparent

difference in family behaviors (or workers' rating) on this domain are confirmed in subsequent analyses of other outcomes (living arrangements after IFRS) in relation to NCFAS-R domain ratings. These analyses are presented in the section titled "Child and Family Outcomes".

Figure 14. IFRS Readiness for Reunification Ratings at Intake and Closure



Although Figure 14 shows that the number of families entering IFRS services with problem ratings in readiness for reunification resembles the numbers in other domains, it shows less progress away from the more serious problem ratings. In this way it resembles ambivalence. Overall, 55% of families enter IFRS with problem ratings, 31% with moderate or serious problem ratings. At closure, the overall proportion of families rated in the problem range is reduced only to 38% (from 55%), and at the moderate to serious levels they are reduced only to 20% (from 31%). Again, the reason that there is less apparent movement is that there is more movement in both directions on this domain, also unique to reunification cases. Some families

struggle to become ready to have their children return home, and some never achieve that state of readiness. Others deteriorate as the reunification approaches, perhaps correlated with ambivalence. Like the observations on ambivalence, these observations are consistent with previous research, and are supported by the data presented in Figure 15, which presents the proportion of families experiencing positive change, no change or negative change.

As seen in Figure 15, the first five domains present similar profiles, with positive change numbers exceeding those of no change, and with negative change numbers ranging from 8% to 13%. Ambivalence is related to both the lowest proportion of positive change and the second highest proportion of negative change. Although readiness for reunification has positive change numbers in line with other domains (except ambivalence), it has the highest proportion of negative change. Thus, the two domains added to the NCFAS-R to capture the unique features of reunification cases seem to have done so.

Figure 15. IFRS Families Experiencing Negative, None or Positive Change on NCFAS-R Domain Scores

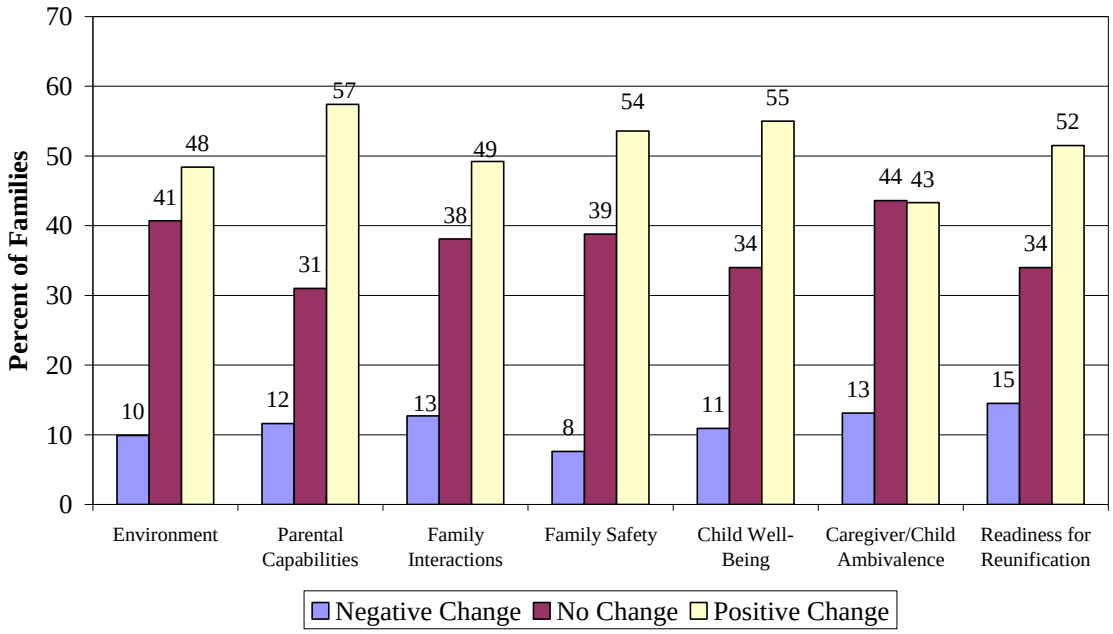


Figure 16. IFRS Families Rated Baseline or Above at Intake and Closure on NCFAS-R Domain Scores

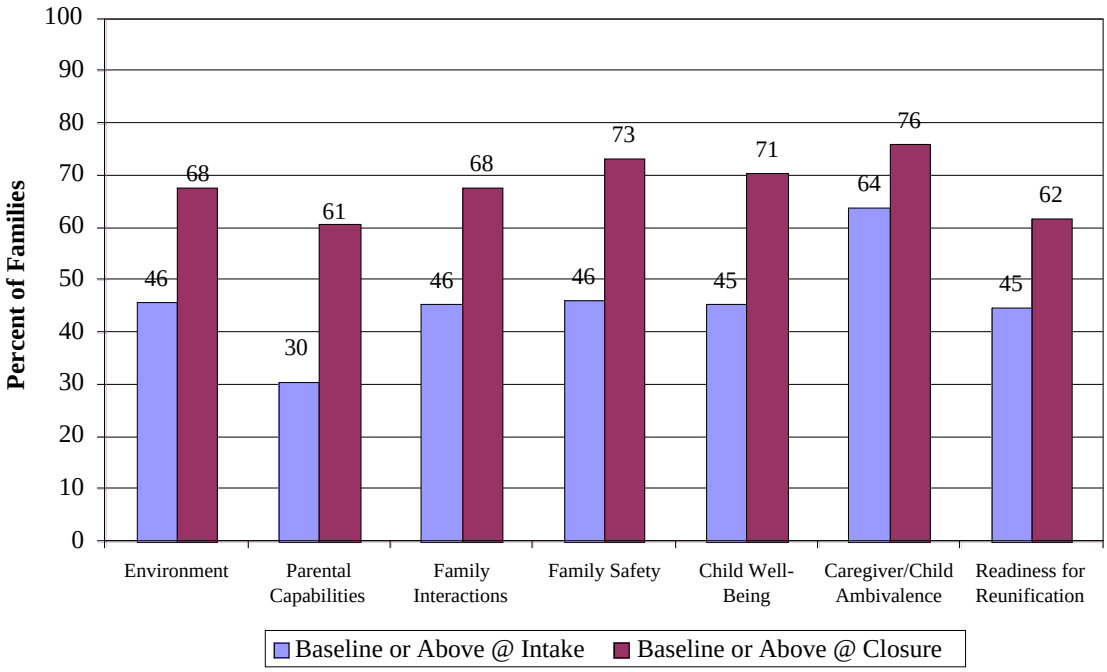


Figure 16 presents the proportions of families rated as being at or above baseline at intake and at closure. Between 30% and 64% of families are rated at or above baseline at intake, and between 61 and 76% are so rated at closure. Overall, these pre/post service comparisons suggest that IFRS services are associated with substantial improvements in all areas of family functioning, although data in earlier figures suggest that the dynamics within individual domains may vary. Again, whereas these NCFAS-R ratings at closure are legitimate outcome measures, they become more meaningful when related to other outcomes to be discussed in the "Child and Family Outcomes" section.

Child and Family Outcomes for IFRS

Placement at closure.

The permanent plans for children and families in this study that were receiving IFRS were consistent with federal policy: for 94% of children the reunification objective was the biological family of origin, and for 4% a relative was identified. All other categories (e.g., step parent, previous guardian, etc.) summed to account for the remaining 2% of children. These children were living in a variety of situations at the time of referral to IFRS, including out-of-home placements. Nearly a quarter (24%) were living with the biological parent, but a similar number (23%) were living with another relative, 3% were in relative foster care, 41% were in non-relative foster care, and 8% (combined) were in a group home, detention center or emergency shelter. The living situations of IFRS children at the time of intake and case closure are presented in Table 15.

As was true with IFPS cases, determination of the true success rate of IFRS cases is somewhat problematic, in that not all states could definitively indicate the legal status of the permanent plan at the time that the case was closed by the IFRS service providers. In order to use a consistent measure across all contributing jurisdictions, the proxy variable "living arrangement at case closure" was used as the measure for reunification. Bear in mind that a permanent plan of reunification with the biological parent may be changed to "permanent placement" with a relative, for example, and such an outcome satisfies the legal requirement for permanency, although it may not be classified as a successful reunification due to variations in state definitions of reunification. With the caveats of using "living situation at case closure" as a proxy, and acknowledging the differences in state definitions, it is known that 54% of children were living with the biological parents at case closure, and 13% were living with other relatives.

Table 15. Living Situation of IFRS Children

Child Living Situation (N=622)	Number	Percent
Living Situation at Case Opening	**519**	**83.4%**
In-Home	**248**	**47.8%**
Parent, Birth	123	23.7%
Parent, Adoptive	1	0.2%
Relative	117	22.5%
Friend	4	0.8%
Guardianship	3	0.6%
Out-of-Home	**271**	**52.2%**
Foster Care, Relative	15	2.9%
Foster Care, Non-Relative	211	40.7%
Group Home	35	6.7%
Detention/Jail	2	0.4%
Emergency/Shelter Care	4	0.8%
Runaway	3	0.6%
Other	1	0.2%
Living Situation at Case Closing	**581**	**93.4%**
In-Home	**401**	**69.0%**
Parent, Birth	311	53.5%
Parent, Adoptive	3	0.5%
Relative	77	13.3%
Friend	4	0.7%
Guardianship	6	1.0%
Out-of-Home	**180**	**31.0%**
Foster Care, Relative	2	0.3%
Foster Care, Non-Relative	136	23.4%
Group Home	21	3.6%
Detention/Jail	2	0.3%
Psychiatric Placement	2	0.3%
Runaway	4	0.7%
Other	13	2.2%

An additional small number (2%, combined) had been reunited with an adoptive parent, or former guardian. Together these categories sum to 69% of cases that can be considered to be successful reunifications, or alternative form of family permanence. Of the remaining 31% of children, 23% were in non-relative foster care, 4% were in a group home or a detention center,

and the remaining 4% were in some other type of placement (e.g. psychiatric hospital) or were on runaway status.[3]

Interestingly, although there were no between-state differences in the proportion of children placed out-of-home at the beginning of IFRS service (based on four states' data), there were differences among states with respect to out-of-home placement at case closure (chi square = 36.15, df = 5, $p < .001$). Placement rates ranged from 0% (in Indiana, based upon only 7 cases) to 39% and 41% in North Carolina and Pennsylvania, respectively. Between these extremes were Washington (15%), Missouri (19%), and Colorado (21%).

NCFAS-R ratings and placement at closure.

The data from the NCFAS-R are revealing with respect to the relationships between the domains of family functioning and the likelihood of successful reunification (see Table 16). Unlike the relationship between the NCFAS and IFPS placements, the intake ratings on the five domains on the NCFAS-R that are the same as the NCFAS did not predict subsequent placements among children in reunification cases. The most logical explanation for this difference is that most reunification families are not in crisis at the time that reunification services are begun because the child(ren), often the focus of the crisis, have been removed from the home and the parental and child behavior that is often observable during crises is less visible. Thus, families that would appear to be behaving in the extreme during crises appear to be less chaotic and emotionally stable. However, the intake ratings on the two domains added to the

[3] The total number of successful reunifications is likely to be somewhat higher than indicated due to the case recording practices in some states. For example, it is known that in some cases the IFPS provider returns case management authority to the custodial agency at the time that the case recommendation is for reunification to be made the legal status of the family at the next scheduled court hearing, but the IFRS agency providing the data for this study could not confirm that the custodial agency or court acted favorably upon that recommendation. In those cases, the child could have been living with the biological parent, or in foster care pending court action, rendering the proxy measure somewhat biased against indicating successful reunification.

NCFAS to transform it into the NCFAS-R do predict subsequent placement. This observation supports the relevance of these two domains to the unique aspects of reunification cases.

Table 16. IFRS Families Experiencing an Out-of-Home Placement at Case Closure for NCFAS-R Domains by Ratings at Intake and Closure

	Percent of Families for NCFAS-R Domain						
Domain Rating	**Environ-ment**	**Parental Capabil-ities**	**Family Interact-ions**	**Family Safety**	**Child Well-Being**	**Ambiva-lence**	**Readi-ness**
At Intake							
Clear Strength	33	33	13	33	0	8	0
Mild Strength	23	33	26	38	25	29	23
Baseline/Adequate	33	30	28	30	38	36	23
Mild Problem	40	30	44	33	38	43	40
Moderate Problem	31	40	38	41	30	42	43
Serious Problem	53	44	50	41	46	50	58
Chi-Square[1]	9.04	4.26	9.51	3.07	8.04	11.53*	20.31**
At Closure							
Clear Strength	40	32	19	26	11	11	12
Mild Strength	21	22	33	28	27	39	22
Baseline/Adequate	36	27	24	32	36	30	33
Mild Problem	45	41	41	40	47	53	50
Moderate Problem	39	51	62	68	52	59	59
Serious Problem	71	56	64	40	50	60	56
Chi-Square[1]	18.74**	17.64**	26.15***	17.04**	16.31**	26.46***	31.44***

[1]For each chi-square statistic df=5.
*p<.05
**p<.01
***p<.001

Intake ratings of moderate or serious problem on ambivalence are associated with 42% and 50% likelihoods of placement, respectively, after IFRS services. Even an intake rating of

mild problem on ambivalence is associated with a 43% likelihood of placement. These placement probabilities are significantly higher than the remainder of the scale ratings, which ranged from 8% to 36% (chi square = 11.53, df = 5, $p < .05$). Moderate or serious problem ratings at intake on the readiness for reunification domain are even more strongly predictive of future placement, with post IFRS placement probabilities of 43% and 58%, respectively. These are higher than all other scale point ratings (chi square = 20.31, df = 5, $p < .01$).

Moderate to serious problem ratings at closure on all NCFAS-R domains are highly likely to result in placement. In many cases, the likelihood of placement exceeds 50% with these ratings. Although there is some non-linearity with respect to closure ratings on environment and likelihood of placement (e.g., mild problem ratings have a higher placement probability than moderate problem ratings), the serious problem rating is associated with a 71% placement probability. Moderate and mild problem ratings are associated with 45% and 39% placement probabilities. These are significantly higher than the strength ratings (chi square = 18.74, df = 5, $p > .01$).

On virtually all other domains, the relationships between more problematic ratings and placement probabilities is more linear, and the increased probabilities of placement for those ratings are statistically significant: For parental capabilities moderate and serious problem ratings at closure are associated with 51% and 56% probabilities of placement, compared to all other scale points ranging from 22% to 40% (chi square = 17.64, df = 5, $p > .01$). For family interactions, moderate and serious problem ratings at closure are associated with 62% and 64% probabilities of placement, compared to all other scale points ranging from 19% to 41% (chi square = 26.15, df = 5, $p > .001$). For family safety, moderate and serious problem ratings at closure are associated with 68% and 40% probabilities of placement, compared to all other scale

points ranging from 26% to 32% (chi square = 17.04, df = 5, p > .01). For child well-being, moderate and serious problem ratings at closure are associated with 52% and 50% probabilities of placement, compared to all other scale points ranging from 11% to 46% (chi square = 16.31, df = 5, p > .01). For ambivalence, moderate and serious problem ratings at closure are associated with 59% and 60% probabilities of placement, compared to all other scale points ranging from 11% to 53% (chi square = 26.46, df = 5, p > .001). And, for readiness for reunification, moderate and serious problem ratings at closure are associated with 59% and 56% probabilities of placement, compared to all other scale points ranging from 12% to 50% (chi square = 31.44, df = 5, p > .01).

NCFAS-R change scores and placement at closure.

For most domains, knowing whether change occurred, and in which direction change occurred, is also predictive of placement after reunification services (see Table 17). Recall that movement in one direction or another does not automatically indicate that movement was sufficient to cross from the problem range into the strength range, or vice versa. Similarly, a finding of "no change" might be a good thing if the initial rating is in the strength range, or a bad thing if it is a moderate or serious problem. However, on every domain, the differences in probabilities of placement are strongly and significantly associated both with movement per se, and with direction of movement.

For environment, the relationship between occurrence and direction of change, and post service placement was not significant. Although families experiencing a positive change had the lowest placement rate (30%), this rate was apparently not different enough from the rates associated with no change and negative change (42% and 36%) to be significant. Furthermore,

the no change group of families had a slightly higher placement rate than did the negative change group. There is no parsimonious explanation for this non-linearity, although it seems similar to the non-linearity observed on the individual scale point ratings and probability of placement.

Table 17. IFRS Families Experiencing an Out-of-Home Placement at Case Closure for NCFAS-R Domains by Measured Change from Intake to Closure

	Percent of Families for NCFAS-R Domain						
Measured Change	**Environment**	**Parental Capabilities**	**Family Interactions**	**Family Safety**	**Child Well-Being**	**Ambivalence**	**Readiness**
Negative	36	50	38	44	41	45	42
None	42	45	44	45	44	38	49
Positive	30	26	28	27	28	30	27
Chi-Square[1]	4.10	12.87**	7.81*	9.60**	6.89*	3.25	12.21**

[1]For each chi-square statistic df=2.
*p<.05
**p<.01

For parental capabilities, however, any positive change is associated with a 26% probability of placement after IFPS; experiencing no change is associated with a 45% probability of placement; and any negative change is associated with a 50% probability of placement. These differences are significant (chi square = 12.82, df = 2, $p < .01$).

For family interactions, any positive change is associated with a 28% probability of placement after IFPS; experiencing no change is associated with a 44% probability of placement; and any negative change is associated with a 38% probability of placement. There is a slight nonlinearity in these data, but positive change is significantly different from no change or negative change (chi square = 7.81, df = 2, $p < .05$).

Family safety is only slightly more compelling, with any positive change being associated with a 27% probability of placement after IFPS; experiencing no change being

associated with a 45% probability of placement; and any negative change being associated with a 44% probability of placement. These differences are significant (chi square = 9.61, df = 2, $p < .01$).

For child well-being, any positive change is associated with a 28% probability of placement after IFPS; experiencing no change is associated with a 44% probability of placement; and any negative change is associated with a 41% probability of placement. The slight nonlinearity re-emerges in these data, but, again, positive change is significantly different from no change or negative change (chi square = 6.89, df = 2, $p < .05$).

The rates of placement associated with changes on ambivalence are not significant. The placement probabilities are linear and comport with the logic of positive change being associated with decreased likelihood of placement. However, the differences are not large enough to be statistically reliable.

For readiness for reunification, compelling differences are evident. Any positive change is associated with a 26% probability of placement after IFPS; experiencing no change is associated with a 49% probability of placement; and any negative change is associated with a 42% probability of placement. There is a slight nonlinearity in these data, but positive change is significantly different from no change or negative change (chi square = 12.21, df = 2, $p < .01$).

NCFAS-R baseline/adequate functioning and placement at closure.

Unlike the findings for the NCFAS and placement-prevention families, being at or above baseline on the NCFAS-R domains appears to have some predictive association with placements or other forms of unsuccessful reunification; or, conversely, being below baseline at intake is associated with unsuccessful reunification. Intake ratings below baseline on three of the seven

NCFAS-R domains (family interactions, ambivalence, and readiness for reunification) are associated with subsequent placement rates above 40% (42%, 44%, and 45%, respectively). Clearly, for many families, progress in these areas should be a focus of the intervention plans.

Table 18. IFRS Families Experiencing an Out-of-Home Placement at Case Closure for NCFAS-R Domains by a Rating of Baseline/Adequate or Above at Intake and Closure

	Percent of Families for NCFAS-R Domain						
Rated Baseline/ Adequate or Above	**Environ-ment**	**Parental Capabil-ities**	**Family Interact-ions**	**Family Safety**	**Child Well-Being**	**Ambiva-lence**	**Readi-ness**
At Intake							
No	39	37	42	38	37	44	45
Yes	30	30	27	32	33	30	22
Chi-Square[1]	2.91	1.24	7.64**	1.30	.523	5.26*	15.48***
At Closure							
No	46	48	53	50	49	56	54
Yes	30	26	27	30	29	29	24
Chi-Square[1]	7.85**	14.94***	18.84***	10.28**	9.99**	17.17***	25.88***

[1]For each chi-square statistic df=1.
*p<.05
**p<.01
***p<.001

Being at or above baseline at IFRS closure, however, is predictive of placement with respect to all seven domains. Across all domains, the placement rates of children are only half to two-thirds, approximately, the placement rates of children whose families are below baseline at closure, and in every case, the differences are statistically significant. Families at baseline or above at closure experienced a 30% placement rate, compared to 46% for those below baseline (chi square = 7.85, df = 1, p < .01). For parental capabilities, the placement rate for families at or above baseline was only 26%, compared to 48% for those below baseline (chi square = 14.94, df

= 1, p < .001). Similarly, for family interactions, the placement rate for families at or above baseline was 27%, just about half the placement rate (53%) of families below baseline (chi square = 18.84, df = 1, p < .001).

Although not quite as compelling, the placement rates for families at or above baseline at closure on both family safety and child well-being were about three-fifths that of families below baseline. For family safety, the rates were 30% and 50%, respectively (chi square = 10.28, df = 1, p < .01), and for child well-being the rates were 29% and 49%, respectively (chi square = 9.99, df = 1, p < .01).

Predictive associations for ambivalence and readiness for reunification were highly significant, with placement rates approximately half those for families below baseline. Being at or above baseline at intake on ambivalence was associated with only a 29% placement rate, compared to a 56% rate for those below baseline (chi square = 17.17, df = 1, p < .001). For readiness for reunification, the rates were 24% and 54% respectively (chi square = 25.88, df = 1, p < .001).

IFRS outcomes associated with race and substance use.

As with IFPS families, race and substance use are important variables in child welfare research due to the longstanding issue of racial disproportionality and the capacity of parents (and service systems) to address substance use as a problem associated with ineffective or unsafe parenting and with placement. The same race and substance-use variables examined for IFPS were examined for IFRS families, including the family assessment ratings and placement rates of children of different races before and after IFPS services, and the use of alcohol and other substances in relation to assessments and service outcomes.

Like IFPS, there were no differences in the rates of placement at the beginning of IFRS services. However there were significant differences in child placement rates at closure, with Other (all non-White and non-Black race categories) experiencing the lowest placement rate (26%). Whites had a slightly higher placement rate (31%), but Blacks had a significantly higher placement rate (46%) than both other groups (chi square = 7.03, df = 2, $p < .05$).

Because these differences in placement outcomes were not observed in the IFPS/placement-prevention data, the intake/closure data for reunification families were examined to see if families of different racial groups were more or less likely to be rated as having experienced a positive change on the NCFAS-R domains, as a result of having had IFRS services. No significant differences were observed across racial groups in families experiencing positive change for environment (47% to 54%), parental capabilities (53% to 59%), child well-being (53% to 59%), ambivalence (42% to 48%), or readiness for reunification (47% to 64%).

However, for both family interactions (chi square = 12.47, df = 4, $p < .05$) and family safety (chi square = 14.98, df = 4, $p < .01$) there were significant differences in change scores as a function of race. For family interactions, the proportions of families experiencing positive change ranged from 44% (Whites) to 58% (Blacks). This difference was accompanied by larger proportions of Whites (18%) and Others (15%) experiencing negative changes on this domain compared to Blacks (4%). Again, very small Ns may have contributed to these differences, and there is no parsimonious explanation for the finding. Similarly, there were differences in the proportions of families experiencing positive change on family safety, as a function of race. In this case, Others had the largest proportion experiencing positive change (67%) followed by Whites (54%) and Blacks (49%). These differences are consistent with the placement

differences previously noted, in that Others had the lowest post-IFRS placement rates, followed by Whites and Blacks.

With respect to substance use, the same general caveats apply to the IFRS data as applied to the IFPS data. The indicated rates of substance use are low (5% for alcohol, 20% for other drugs, 9% for poly-drug use), and the N is small (113 families, total, where a substance problem was indicated. Unlike IFPS families, there were small variations in the type(s) of substances used, as a function of race. Black families had the highest proportions of drug-only families (27%) compared to Whites and Others (21% and 19%, respectively), and Others had the highest proportion of alcohol-only problems (11%) compared to Whites and Blacks (6% and 2%, respectively). Blacks had the lowest proportion of poly-substance use (3%) compared to other races in the sample (White at 12%, Others at 15%). These differences, although not large, were significant (chi square = 13.36, df = 6, $p < .05$).

Among IFRS families, there were no differences across drug types with respect to the likelihood of child placement at intake, and there were no differences in the likelihood of placement at closure. Also, there was no difference between the closure rate of non-substance using families and any of the substance using groups. This finding is encouraging and suggests that as with IFPS services, IFRS services can deal with substance use among caregivers about as well as it can with the variety of other issues presenting at intake.

There are no clear trends on family assessment variables observable from the NCFAS-R data when those data are organized along the bivariate dimension of being at or above baseline, or below baseline, at intake, and those ratings are related to substance use. This may be due, at least in part, to the differences between the crisis-driven nature of IFPS families versus the more deliberate and rehabilitative nature of IFRS interventions. However, some differences do emerge

when families are rated at closure. On the environment domain, there are no trends exhibited at intake, and only an insignificant trend evident at closure, where 73% of non-substance using families are rated as being at or above baseline at closure, compared to 69% for alcohol only families, 60% for drug only families, and 52% for poly-substance families.

No trends are evident for parental capabilities at intake, although a significant trend does emerge at closure, with 68% of non-substance using families being rated at or above baseline, but only 44%, 48%, and 41% of alcohol using families, drug using families, and poly substance using families, respectively (chi square = 15.19, df = 3, $p < .01$). The same pattern is evident for family interactions, with no trends evident at intake, but with 72% of non-drug families being at or above baseline at closure, and only 56%, 62%, and 55% of alcohol using families, drug using families, and poly-substance using families, respectively. However, the trend is not significant.

Ratings on family safety do not appear to be differentially affected by substance use at intake, although differences do emerge at closure, with 80% of non-drug families being rated at or above baseline, compared to 50%, 66%, and 55% for alcohol, drug, and poly-substance using families, respectively (chi square = 1.92, df = 3 , $p < .001$). Interestingly, no substance-related trends are evident on the domain of child well-being at either intake or closure.

Trends are, however, evident on the ambivalence and readiness for reunification domains when substance use is considered. On ambivalence, trends are not evident at intake. However, at closure 82% of non-substance using families are rated at or above baseline, compared to 68% of alcohol using families, 65% of drug using families, and 59% of poly-substance using families. These differences are significant (chi square = 12.61, df = 3, $p < .01$). While it is gratifying to see such high proportions of substance-using families being rated at or above baseline on ambivalence at closure, the difference between the substance using families and the non-

substance using families is not trivial, ranging from 15% to 23%. Similarly, no trends are evident at intake on readiness for reunification, but at closure, 67% of non-substance using families are at or above baseline, compared to 60% of alcohol using families, 50% of drug using families, and 48% of poly-substance using families. These trends are very similar to those on the ambivalence domain, but are not as compelling.

Similar changes in the individual scale ratings on all domains across all drug categories are observable for the NCFAS-R data on IFRS families as were observed on the NCFAS data on IFPS families. However, the individual cell sizes are too small to report meaningfully (between 38% and 50% of the cells contain too few observations for reliable analyses of individual scale ratings across all domains on the NCFAS-R).

Recalling that there are no differences in placement rates of children at closure as a function of substance use at the time of intake, it is interesting to note the progress that families make when the data reflecting positive changes are analyzed (see Table 19). Across all intake ratings and all substance categories, substance using families make substantial progress. Sometimes they make as much or even more progress than non-substance using families. For example, 51% of non-substance using families registered a positive change on their rating on environmental concerns, but so did 63% of alcohol using families, 46% of drug using families, and 45% of poly-substance using families. Very similar findings were noted for parental capabilities (non-drug families, 60%; alcohol families, 69%; drug families, 45%; and poly-substance families 45%). This pattern is repeated across all domains, suggesting that IFRS is capable of impacting all families, regardless of drug use, but apparently being particularly capable of impacting alcohol using families. The advances made by these families during IFRS

services is likely responsible for the absence of differences in placement rates of children at the conclusion of IFRS.

Table 19. IFRS Families Experiencing Positive Change on NCFAS-R Domains by Caretaker Substance Use

NCFAS-R Domain	Percent of Families Experiencing Positive Change				
	None	Alcohol Only	Drugs Only	Alcohol and Drugs	Chi-Square[1]
Environment	51	63	46	45	13.46*
Parental Capabilities	60	69	45	45	9.49
Family Interactions	52	63	43	48	14.31*
Family Safety	55	69	43	62	11.88
Child Well-Being	59	63	41	52	10.40
Caregiver/Child Ambivalence	44	64	38	39	14.33*
Readiness for Reunification	54	64	41	46	17.04**

[1]For each chi-square statistic df=6.
*p<.05
**p<.01

IFRS outcomes associated with type of child maltreatment.

Child maltreatment data were available for 287 (86%) of the 332 families in the IFRS database. Of this number 52 (18%) were referred for physical abuse. An additional 29 (10%) were referred for sexual abuse, 209 (73%) for various forms of neglect, and 70 (24%) for family conflict. As was true with IFPS maltreatment data, these numbers sum to more than 100% because children are sometimes referred on the basis of multiple types of maltreatment. This mechanism for referral complicates analysis of maltreatment data as the analyses do not include unduplicated children. Thus, in the following analyses, each type of child maltreatment (e.g., physical abuse) is compared to all other families where the same type of maltreatment was

indicated as not occurring. However, the problem of comparing children to themselves (because they may have multiple maltreatment types) with respect to risk of placement cannot be avoided.

There were no significant differences in the capacity of IFRS to successfully reunify families in which the type of maltreatment was physical abuse, sexual abuse, or family conflict. However, IFRS was less successful reunifying neglectful families than other types of families, and there were fairly strong trends in other types of maltreatment that are likely to have achieved significance were it not for the problem of unduplicated counts (the same caveat applies to these data as applied to IFPS data: some children contribute to both sides of the analysis) and the lower Ns, which results in less statistical power.

IFRS services resulted in successful reunification of 75% of families in which physical abuse had been present, compared to the 64% rate for those where physical abuse was not indicated (Fisher's Exact test $p = .19$). Thus, IFRS was relatively successful in addressing situations characterized as physically abusive. This is particularly true as compared to sexual abuse, where only 50% of families were successfully reunited, compared with 68% for those where sexual abuse was not indicated (Fisher's Exact test $p = .061$). The success rate for neglect was 61%, compared to an 81% success rate for those where neglect was not indicated, a difference that was large and significant (chi square = 9.71, df = 1, $p < .01$). IFRS was also slightly less successful at reunifying families characterized by family conflict (58% success rate) compared with families not characterized by family conflict (69%) (Fisher's Exact test $p = .107$).

Recall that the overall success rate of the IFRS programs in this study was 69%, less than the federal CFSR standard for reunification cases. There was also more variation among contributing states with respect to the program models used for IFRS than for IFPS. Thus, it appears that there is a need to test individual variations on the IFRS models more closely and to

examine the treatment components to attempt to determine the best intervention approach for different types of child maltreatment.