

Accountability in Child Welfare Services: Developing a Statewide Outcome Evaluation Program

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Questions are often raised regarding the effectiveness and value of treatment programs for children and families. Recently, programs have been increasingly held accountable for services offered. In response, the member agencies of IARCCA have developed a comprehensive outcome measurement program. This article describes the project, focusing on the conditions that led to its inception and how the measurement plan was developed. In addition, the article includes information on the selection of personnel, measurement instruments, and methods and on the process of data collection. Summary results are provided, including how these results are utilized to improve services. Finally, the continued expansion and future directions of the Outcome Project are discussed.

Keywords: residential treatment, program monitoring, outcome assessment, program evaluation, foster care

Exploration of the effectiveness of out-of-home child treatment is due in part to the number of youths receiving such services. A recent survey reported that in the United States, 530,000 children have been placed in out-of-home care settings (Petit et al., 1999). During 2001, 5,711 children in Indiana were placed in

residential care or foster care, a number that represents a 5.2% increase from the previous year (Indiana Family and Social Services Administration, 2003). Improvement rates for youths placed in out-of-home treatment services have been addressed recently by many researchers (Frensch & Cameron, 2002; Holden et al.,

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2002; Lyons, Terry, Martinovich, Peterson, & Bouska, 2001; Lyons, Uziel-Miller, Reyes, & Sokol, 2000). In general, findings suggest that children improve with treatment. In a similar vein, others have suggested that demonstrated strengths are related to treatment outcomes in both clinical and functional domains; however, strength-based approaches are not often utilized (Lyons et al., 2000).

In a review of residential treatment programs, Frensch and Cameron (2002) reported that even though treatment gains are demonstrated, successful adjustment is maintained only when there is a positive environment to sustain it (i.e., family support). In addition, these authors related that deciding when a child needs to be placed in out-of-home treatment is challenging because specific guidelines have not been established. Therefore, although research has assessed symptom/clinical improvement in youths and begun to address appropriateness and effectiveness of services, concerns about accountability of out-of-home treatment remain (Frensch & Cameron, 2002; Pfeiffer, 1996). Many programs have existed without attention to whether or not services offered addressed the needs of youths and their families. Concomitantly, few studies have examined whether youths and their families are satisfied with the treatment they receive and whether youths show functional improvement after they have participated in programs. In addition, researchers have called for outcome monitoring to establish accountability and demonstrate effectiveness (Beck, Meadowcroft, Mason, & Kiely, 1998).

The need for greater accountability is voiced more frequently by those who regulate social services. The Government Performance and Results Act of 1993 (see Office of Management and Budget, 2004) has specified that programs funded by the United States government must set goals and publicly report progress toward meeting these goals (Buckmaster, 1999). The federal government enacted child and family services reviews (CFSRs) to assess whether public child welfare agencies are measuring up to specific outcome goals as established by the government (U.S. Department of Health and Human Services, 2000). The government began to implement CFSRs in each state public child welfare agency in 2000 particularly to assess federally defined goals for safety, permanency, and child and family well-being.

States often enter into contractual arrangements with private providers for service provision. Many private agencies have adopted goals consistent with those of the state, yielding an increased focus on outcomes. In addition, the growth of managed health care has placed pressure on mental health providers to demonstrate quality outcomes (Broskowski, 1991). Placing agencies, parents, and participants are also interested in service outcomes, and understanding consumer perspectives has been noted as an important focus in the child mental health literature (Hoagwood, Jensen, Petti, & Burns, 1996). Consequently, many individuals and groups want to better understand how resources are being utilized and how effective the services offered are.

Although outcome research has generally demonstrated that treatment is more effective than no treatment (Pratt & Moreland, 1996; Vermillion & Pfeiffer, 1993), the literature is lacking methodologically sound outcome studies (Bates, English, & Kouidou-Giles, 1997; Curry, 1991). Additional research is clearly needed, especially research using standardized measures of improvement and finer grained analyses of the variables that may influence the efficacy of treatment (Pratt & Moreland, 1996). Although assuring the effectiveness of child welfare services is critical to a program's success, treatment services also need to achieve the best outcomes at the lowest cost (Kluger & Alexander, 1996; Mordock, 2002; Pratt & Moreland, 1996). Results from studies may then increase public awareness with regard to the value and importance of treatment and in turn influence public policy (Pratt & Moreland, 1996).

In 1995, the Indiana Council of Juvenile and Family Court Judges challenged the state's residential care and therapeutic foster care community to provide evidence that the services provided to abused/neglected/delinquent children living in out-of-home care were effective. The IARCCA Board of Directors, in response to this challenge, made a commitment to work with the Indiana Council of Juvenile and Family Court Judges to establish an outcome project and to identify measurable variables that evaluate the effectiveness of these services. This article provides the history of the IARCCA Outcome Measures Project for Indiana (Outcome Project), describes the evaluation model, and

addresses general results. Future articles will report specific findings and psychometric data from the Outcome Project.

History of the IARCCA Outcome Project

IARCCA was founded in 1944 as an association of children and family services. With 90 member agencies, IARCCA has been committed to the provision of quality services and has remained concerned with the welfare of the children and families its member agencies serve. IARCCA member agencies provide treatment services in the following areas: residential care, foster care, transitional/independent living, home-based treatment (including day treatment and family reunification and preservation programs), shelter care, and crisis stabilization. The organization provides training, monitoring of state and federal legislative issues, liaison activities, and dissemination of information, advocacy, and placement assistance. As part of IARCCA's commitment to its members and the clients they serve, the organization has undertaken a study of outcome measurement and an evaluation of program accountability.

Project Development

After receiving the challenge from the juvenile court judges to demonstrate the effectiveness of the programs and services provided to the children and families placed in their care, IARCCA responded by developing the Outcome Project. Focus groups were held throughout the state at which all program stakeholders were invited to discuss appropriate ways to measure outcome effectiveness. The groups, which took place over the spring and summer of 1996, were attended by staff from child welfare and juvenile justice offices and IARCCA member agencies.

The focus group discussions generated several common themes and ideas. First, it was felt that the decision to measure outcomes must apply to the diverse array of services and programs provided by member agencies. Adding to this concern was the broad range of children seen and their unique presenting needs. It was also decided that outcome measures should provide an unbiased perspective. Although personal opinions from those involved in the system (i.e., caseworkers, probation officers, and

judges) can have tremendous impact, personal opinions about client change were seen as inappropriate in an outcome evaluation. Therefore, the use of unbiased measures became a priority for measuring outcomes. Finally, because design and implementation of outcome research take time, it was concluded that stakeholders must allow IARCCA appropriate time to design, pilot, and implement an outcome measures project.

Upon conclusion of the statewide focus groups, IARCCA created a task force to further develop the Outcome Project. The task force was composed of individuals from member agencies who volunteered their time over the course of one year. Several task force members were selected because of their experience in developing and conducting outcome research. Other members were selected for their expertise in providing specific programs and services to families and children (e.g., foster care, transitional living programs). Once the task force had been created, it was charged by IARCCA to (a) operationally define the programs to be evaluated, (b) operationally define the outcome measures to be utilized, (c) identify the data collection process, (d) establish a pilot study to allow for review of the data collection process, and (e) analyze early data results. The task force met monthly, with tasks assigned to members between the scheduled meetings to develop a pilot program.

Program types initially included in the Outcome Project were residential care, foster care, transitional/independent living, crisis intervention, shelter care, and home-based treatment; these programs were operationally defined in program manuals (IARCCA: An Association of Children and Family Services, 1998). A listing of the identified programs and times of data collection for the pilot study is provided in Table 1. Specific measures gathered within each program type varied and were based on the relevance to the client populations served. Shelter care and crisis stabilization programs, because of the large number of children served, were asked to provide information on the first five intakes and the first five discharges of each month. For all other program types, agencies were asked to provide information on all of the children and families served. Assessments occurred across the following domains: clinical improvement, functional improvement, effec-

Table 1
Data Collection Schedule for Outcome Measures by Program Type

Outcome measure	Program type			
	Home-based and day treatment ^a	Residential and foster care ^b	Transitional living ^a	Crisis stabilization and shelter care ^c
Clinical improvement				
Global Assessment of Functioning	I, D	I, D	I, D	I, D
Child Problem Checklist	I, D	I, D	I, D	I, D
Family Risk Scales	I, D, F	I, D, F	—	—
Family Problem Checklist	I, D	I, D	—	—
Effectiveness of discharge				
Restrictiveness of environment	D, F	D, F	D, F	—
Nature of discharge	D	D	D	D
Permanency plan achieved	D, F	D, F	D, F	—
Functional improvement				
Education	D, F	D, F	D, F	—
Employment	D, F	D, F	D, F	—
No new court involvement	F	F	F	—
No new abuse/neglect	F	F	F	—
Consumer satisfaction				
Child	D	D	D	D
Parent	D	D	—	D
Referring agency	D	D	D	D
Child Risk Factor Survey	I	I	I	I

Note. Dashes indicate that the measure was not collected. I = data collected at intake; D = data collected at discharge; F = data collected at follow-up.

^a Follow-up data are collected 3 months after discharge. ^b Follow-up data are collected 6 months after discharge. ^c Follow-up data are not collected for this program.

tiveness of placement, and consumer satisfaction. Assessments of clinical improvement in the child and family, functional improvement in the child, effectiveness of discharge, and consumer satisfaction measures are also outlined in Table 1.

Measures of clinical improvement included evaluating difficulties presented in the child and the difficulties presented in the family. Difficulties in children were assessed by the Global Assessment of Functioning score (GAF) from the *Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition (DSM-IV)*; American Psychiatric Association [APA], 1994). The GAF was assessed at intake and discharge by a clinician familiar with the child's behavior. This measure of an individual's overall level of adaptive functioning has demonstrated good interrater reliability in this population (Link, 1998). For example, Pearson correlation coefficients calculated with data collected during the pilot study on the sample revealed an overall coefficient of 0.90 ($N = 950$), with program-specific coefficients ranging from 0.66 for residential care ($n = 366$), 0.84 ($n = 70$) for transitional

living programs, and 0.87 ($n = 255$) for foster care programs. The coefficient for crisis stabilization programs was 0.89 ($n = 102$); for shelter care, it was 0.96 ($n = 145$). Although the home-based program correlation was 0.97, it should be noted that the sample size was small ($n = 13$). Other researchers have established the GAF's reliability and validity (Hilsenroth et al., 2000; Jones, Thornicroft, Coffey, & Dunn, 1995). For example, GAF ratings were significantly related to the Global Assessment of Relational Functioning from the *DSM-IV* (APA, 1994) and the global severity rating from the Symptom Checklist—90—Revised (Derogatis, 1975) in the Hilsenroth et al. (2000) study.

In addition to the GAF, the Child Problem Checklist (CPC) was used to assess problematic behaviors. Developed by the task force, the CPC contains 32 dichotomous items that reflect the range of problems children served by member agencies commonly experience. An operational definition of the presenting problems (i.e., a glossary of terms) was developed and provided for raters. The number of problems, summed to obtain a total score, was collected at

intake and discharge. At intake, problems were endorsed if they were present within one year prior to intake; at discharge, problems were endorsed if they were present within one month of that time. The psychometric properties of this scale have been explored, and it has demonstrated adequacy for rating problems seen in this population. Studies of the psychometric properties of the scale are in progress.

Difficulties seen in families were assessed by the Family Risk Scales (FRSs; Magura, Moses, & Jones, 1987). A standardized measure with adequate psychometrics, the FRSs were designed to assess a variety of factors that place a child at risk for out-of-home placement. Although the FRSs include a number of individual scales, only those scales reflecting parent-centered risk were assessed. Scores on this instrument range from .20 (reflecting minimal risk) to 1.00 (reflecting high levels of risk).

In addition to assessing family risk, the Family Problem Checklist (FPC) was developed by the task force to provide a measure of family problems likely to be the focus of family treatment. This checklist provides operational definitions of the items for raters using it. A total score, attained by summing the number of problems endorsed, was obtained at intake and at discharge. Endorsements at intake reflected the number of problems reported within the past year, and discharge ratings reflected the number of problems present at the time of discharge. Total scores range from 0 to 18. Psychometric studies of the FPC are in progress.

Measures of functional improvement included educational outcome, employment outcome, no other substantiated abuse or neglect postdischarge from the program, and no additional court involvement, excluding a review hearing, because of the child's actions postdischarge. Each of these assessments was designed to be dichotomous in nature, and they were established through use of a flow sheet designed by the IARCCA task force. For example, to measure success in education, attendance, achievement, and appropriate behavior were assessed. A positive educational outcome was determined when criteria were successfully met in at least two of the three areas at discharge. Graduation was automatically identified as success for education. At follow-up, if the child maintained attendance or graduated from an educational program, the outcome was consid-

ered positive. For children age 16 years and older, employment was assessed through a single item that indicated whether or not a child was employed at discharge and at follow-up. Subsequent contact with the court system or the Division of Family and Children (DFC) was assessed at follow-up for all programs except crisis stabilization and shelter care. Court contact was assessed through a single item asking if the child was in any court because of his or her actions since discharge for any reason beyond a customary review hearing or traffic infraction. Contact with the DFC was assessed through two items that asked whether the child was a victim of substantiated abuse or neglect since discharge and whether any family member or person living in the child's home had a substantiated abuse or neglect incident since the child's discharge.

Effectiveness of placement was assessed through measures assessing restrictiveness of living at discharge, the nature of discharge, and permanency planning. The Restrictiveness of Living Environment Scale (Hawkins, Almeida, Fabry, & Reits, 1992) was used to assess the level of restrictiveness of children's placements following discharge. This measure provides a list of potential placements ranging from most restrictive to least restrictive so that respondents can determine whether a child has been discharged to a more or less restrictive environment than the one in which she or he was previously placed. The scale also has an option for raters to rate the child as *runaway* if the child has absconded from placement. The nature of the discharge was assessed through a single item asking the respondent to choose one of the following responses with regard to the discharge: (a) *planned* (i.e., child/family completed program in accordance with plan of treatment), (b) *runaway*, (c) *removed* (i.e., child's removal from treatment was initiated/mandated against recommendation of provider), or (d) *administrative discharge* (i.e., child/family discharge was initiated by provider without accomplishment of goals). This item was scored based on who made the decision for the child/family to be discharged (i.e., service provider, placing agency, or juvenile court). The effectiveness of permanency planning for children being served by the different programs was assessed at discharge. Respondents were asked to report what the identified permanency goal

from the current case plan was, with options including reunification with the family, adoption, emancipation/independent living, legal guardianship, other goal, or whether a written case plan had not been established. Respondents were then asked whether the goal from the permanency plan was achieved.

Consumer satisfaction measures were developed to assess satisfaction with services on the part of the child, parent, and referring agency. A review of member agency satisfaction surveys identified common themes from which these scales were developed. Responses to items on these scales occurred on a 7-point Likert-type scale, ranging from *strongly disagree* to *strongly agree*. An average score was calculated for each child, parent, or referring agency representative completing the form. Further study of psychometric adequacy of the scales is in progress.

A 23-item sheet that gathered demographic information was also developed. The Child Risk Factor Scale includes several variables (i.e., age, sex, ethnicity), as well as child (e.g., *DSM-IV* diagnosis, APA, 1994; identified history of abuse or neglect) and family variables (e.g., parent history of psychiatric diagnosis, parent rights terminated), thought to place children at risk for a variety of difficulties. This survey was completed at intake for each child. For many of the variables (e.g., parent history of substance abuse, parent history of incarceration), respondents were given the option to answer *do not know*; thus percentages may under-reflect the true presence of risks in the population. However, it was decided that to be objective, information needed to reflect that which could be verified (i.e., through record review or personal interview). Psychometric properties of the scale are currently being analyzed.

Data Collection

In the spring of 1997, after a full year had been devoted to the development of the Outcome Project, a pilot study was implemented by IARCCA member agencies. The primary purpose of this phase of the project was to ensure the soundness of the data collection procedures. IARCCA member agencies volunteered to participate in the project, and 19 agencies were selected. Pilot agencies were selected to best

reflect the composition of agencies within IARCCA. Thus, both small and large agencies, those representing the full array of services and those in rural and urban environments, were included. In addition, multiple agencies were selected for each program type. Each pilot agency identified a contact person who served as its outcome coordinator. The outcome coordinator communicated directly with the IARCCA office when questions arose. All questions about the data gathering process were submitted in writing to the task force, which continued to meet monthly. Written answers to questions were then sent to all pilot agencies to ensure accuracy in completing the data forms. Outcome Project data were submitted by each participating agency to IARCCA. Each individual agency provided a client code to ensure anonymity and to allow for the correction of data entry errors. Data were collected across one year, after which time analysis occurred and aggregate results were communicated to IARCCA member agencies. No individual data were shared with agencies in the pilot phase.

Following the pilot study, IARCCA implemented the project with all member agencies. From a local university, two faculty members with expertise in research and program evaluation and experience in treatment of youths and families were then hired as independent external program evaluators through a contractual agreement. Using features of a collaborative model (Friend & Cook, 1996; Kurpius, 1978) similar to Schein's (1969) process consultation model, the external program evaluators and the IARCCA Outcome Committee began annual evaluations of program outcome.

The Outcome Project has continued across the last 5 years. Member agencies of IARCCA gather and submit data on the children and families served by their individual agencies. These assessments are identical to that collected in the pilot and described earlier in the section illustrating measures used in the pilot phase. Although the number of member agencies has fluctuated from year to year (ranging from 86 to 94), roughly three quarters of IARCCA member agencies have participated annually in the Outcome Project. The number of cases evaluated annually has averaged 3,367 at intake, 2,912 at discharge, and 1,709 at follow-up. The number of cases evaluated annually is detailed in Table 2.

Table 2
Number of Children Participating by Program Type

Year and time	Program type				Total
	Residential	Foster care	Transitional living	Home-based	
1999					
Intake	1,985	612	216	678	3,491
Discharge	1,868	543	227	487	3,125
Follow-up	958	296	159	287	1,700
2000					
Intake	1,799	602	172	497	3,070
Discharge	1,630	502	165	357	2,654
Follow-up	1,040	296	105	187	1,628
2001					
Intake	1,983	683	222	699	3,587
Discharge	1,698	587	189	471	2,945
Follow-up	978	306	117	193	1,594
2002					
Intake	1,609	795	201	716	3,321
Discharge	1,600	648	186	493	2,927
Follow-up	1,021	352	175	367	1,915

All participating IARCCA member agencies continue to submit data via their outcome coordinators, who maintain responsibility for overseeing the project within their respective agencies. The outcome coordinators send data monthly to IARCCA for compilation. The IARCCA office reviews data for errors and investigates data that are missing or for which values are questioned. Data are then compiled annually and submitted to the external program evaluators for further analysis. Summary data analysis is also provided to each member agency on a biannual basis. This information, which consists of outcomes for an individual agency, is presented along with aggregate information for agency review and utilization.

Data Analysis

Across the 5 years of data collection, the IARCCA Outcome Project has provided annual aggregate analyses of the data. These analyses have produced fairly consistent outcome results, lending support for the reliability and validity of information derived from the data yet also allowing for the identification of potentially important changes over time (Jackson-Walker & Wall, 1999, 2000, 2001, 2002, 2003).

Although detailed information on clinical and functional change scores is listed in Tables 3,4,5, and 6, some description is provided be-

low. It should be noted that information is presented descriptively because inferential statistics or comparisons between programs were not deemed appropriate. This decision was made because intake and discharge data reflect the population of children served by programs, not samples, and the intent of this project was not to compare programmatic differences. This technique has been reported previously (Fabry, Hawkins, & Luster, 1994).

With regard to child clinical outcomes, programs showed improvement from intake to discharge, as measured by both the GAF and the CPC (see Table 3). Residential care programs demonstrated the greatest difference between intake scores and discharge scores on the two clinical measures. It is important to note that the children served in residential care programs had a greater number of problems and lower levels of adaptive functioning at intake than those in the other programs. They appeared to make more change during their treatment, but at the time of discharge, their average level of adaptive functioning continued to be lower than children in the other programs. Home-based, foster care, and transitional living programs showed more modest gains during the treatment period.

With regard to family outcomes, improvement in level of family risk as measured by the FRSs and a reduction in identified family problem areas as measured by the FPC occurred

Table 3
Average Scores for Child Clinical Outcomes From 1998–2002

Outcome measure	Program type			
	Residential	Home-based	Foster care	Transitional living
Global Assessment of Functioning				
1998				
Intake	47.52	63.47	58.48	63.06
Discharge	59.89	63.34	60.92	64.66
1999				
Intake	47.12	61.76	58.11	64.66
Discharge	58.93	66.67	62.47	64.68
2000				
Intake	49.11	63.97	57.69	63.95
Discharge	60.23	66.40	62.55	63.48
2001				
Intake	48.10	59.99	58.49	60.26
Discharge	59.43	65.12	62.66	63.60
2002				
Intake	47.46	62.63	57.47	60.46
Discharge	57.02	66.37	60.92	63.69
Child Problem Checklist				
1998				
Intake	10.08	6.04	6.39	7.11
Discharge	5.63	4.49	5.31	5.01
1999				
Intake	10.06	5.90	6.45	6.16
Discharge	5.62	4.57	5.40	5.47
2000				
Intake	9.60	6.01	6.67	5.87
Discharge	5.12	4.20	4.93	4.54
2001				
Intake	9.14	6.74	6.17	5.64
Discharge	4.93	4.56	4.81	4.29
2002				
Intake	9.22	6.13	6.42	5.09
Discharge	5.34	4.22	5.13	4.28

across all programs. This was particularly true in families of children in foster care, with somewhat less improvement in residential care and home-based programs (see Table 4). It is important to note that respondents were asked whether the same family was rated at both intake and discharge to gain a better understanding of whether families were improving or whether children were actually being discharged to different family environments. Although placement with a different family may suggest negative outcomes, it may also reflect a move to a safer environment. A different family was most likely to be rated at discharge for children in foster care programs. For example, annual percentages for rating the same family at intake and discharge ranged between 46.3%

and 68.3% of the cases in foster care programs across the years of data collection where the family was identified. In residential care programs, the same family was rated in 77.2% to 88.1% of identified families across years, whereas in home-based programs, these percentages ranged from 82.4% to 92.6%.

Families of youths in residential care had substantially lower levels of family risk at follow-up than at discharge. However, families of children in foster care and home-based programs had similar levels of family risk at follow-up as at discharge. It is important to note that the sample size of families available for calculation of this measure was much smaller at follow-up than the total available sample. Therefore, differences in family risk at fol-

Table 4
Average Scores for Family Clinical Outcomes From 1998–2002

Outcome measure	Program type		
	Residential	Home-based	Foster care
Risk Factor Scales			
1998			
Intake	0.54	0.47	0.68
Discharge	0.48	0.47	0.55
Follow-up	0.48	0.39	0.43
1999			
Intake	0.53	0.45	0.69
Discharge	0.46	0.44	0.55
Follow-up	0.46	0.43	0.47
2000			
Intake	0.54	0.46	0.65
Discharge	0.46	0.43	0.53
Follow-up	0.45	0.40	0.47
2001			
Intake	0.52	0.47	0.64
Discharge	0.45	0.45	0.51
Follow-up	0.40	0.43	0.41
2002			
Intake	0.49	0.46	0.65
Discharge	0.44	0.43	0.48
Follow-up	0.38	0.42	0.49
Family Problem Checklist			
1999			
Intake	5.32	3.84	7.13
Discharge	3.99	3.63	4.99
2000			
Intake	4.42	3.64	6.21
Discharge	3.61	2.92	3.56
2001			
Intake	4.04	3.77	5.98
Discharge	2.79	3.36	3.82
2002			
Intake	3.93	3.90	6.29
Discharge	2.87	2.91	3.58

low-up may reflect the fact that higher functioning families are typically easier to reach at follow-up.

Educational outcomes in all program types appeared to be quite positive, both at discharge and in the follow-up samples (see Table 5). Educational success remained greatest in residential care programs, with approximately 85% of children for whom the variable was assessed having positive outcomes. Eight in 10 children in foster care, three quarters of youths in transitional living programs, and close to three quarters of children in home-based programs had positive educational outcomes at discharge. At follow-up, positive educational outcomes were greatest in foster care, whereas transitional

living programs had the smallest percentage of positive outcomes (see Table 4).

A consistent finding in employment outcomes at discharge was the relative success of transitional living programs, followed by home-based, residential care, and foster care programs. Nearly half of youths in transitional living programs were employed at discharge, whereas approximately 2 in 10 youths in residential care programs were employed. Similarly, at follow-up, substantially more youths in transitional living programs were employed than in the other program types. However, the results in foster care and residential care programs were better at follow-up than at discharge, with almost 4 in 10 youths in foster care

Table 5
Functional Outcomes for Children in IARCCA Programs From 1998–2002

Outcome measure	Program type			
	Residential	Home-based	Foster care	Transitional living
Educational success				
1998				
Discharge	84.2	70.7	78.8	66.0
Follow-up	84.9	82.4	87.5	79.0
1999				
Discharge	82.7	68.0	74.7	61.8
Follow-up	87.4	87.6	87.9	70.9
2000				
Discharge	84.2	74.3	78.6	66.2
Follow-up	85.9	87.4	87.9	77.6
2001				
Discharge	86.9	70.6	77.3	64.6
Follow-up	86.8	89.6	90.3	76.0
2002				
Discharge	84.8	73.8	80.2	75.3
Follow-up	85.6	86.1	93.8	76.4
Employment success				
1998				
Discharge	23.3	40.2	44.4	54.0
Follow-up	35.3	44.8	54.3	63.0
1999				
Discharge	24.1	41.4	47.8	52.9
Follow-up	37.1	40.3	53.8	51.3
2000				
Discharge	25.0	41.1	45.2	65.2
Follow-up	22.1	40.3	43.8	50.0
2001				
Discharge	22.1	38.6	37.3	48.6
Follow-up	33.0	29.3	39.6	47.5
2002				
Discharge	21.6	31.9	29.0	48.1
Follow-up	34.5	34.2	38.8	43.2

Note. Numbers represent percentage of positive outcomes.

employed at follow-up and approximately 3 out of 10 youths in residential care and home-based programs employed. Again, these figures are generally consistent with national statistics reported by the Department of Labor on youth employment. A labor force survey providing employment figures for 16- and 17-year-olds found 26% to 48% of the sample employed, with seasonal fluctuations noted (U.S. Department of Labor, 2000).

Another consistent finding was that in all program types, the large majority of children who were followed up at 3 or 6 months post-discharge were not victims of substantiated abuse or neglect during the intervening time period. Specifically, the percentages of children who had not experienced subsequent abuse or

neglect ranged from 95% to 100% across the different program types. In addition, the majority of children had not been involved with the court system as a result of their behavior after discharge. Court involvement was lowest for children in foster care, with 89% of youths having had no court involvement, and highest for youths in residential care programs, where 77% of youths had had no court involvement since discharge. However, it is important to note that this pattern is consistent with the proportion of youths identified as delinquent in each program type as residential care programs had the largest percentage of delinquent youths (over half) and foster care had the smallest percentage of delinquent youths (approximately one sixth).

Table 6
Restrictiveness of Environment at Discharge and Follow-Up

Year and time	Program type			
	Residential	Home-based	Foster care	Transitional living
1998				
Discharge	81.2	71.8	73.1	70.3
Follow-up	78.6	86.1	81.9	88.8
1999				
Discharge	80.6	78.0	72.5	61.4
Follow-up	81.6	92.2	82.8	82.4
2000				
Discharge	79.5	75.1	69.6	64.2
Follow-up	80.9	91.7	82.8	67.6
2001				
Discharge	81.4	78.3	76.6	65.8
Follow-up	82.9	89.2	87.9	74.4
2002				
Discharge	80.0	77.2	71.0	68.3
Follow-up	83.3	92.8	85.9	81.8

Note. Numbers represent percentage of children placed in less or similarly restrictive environments.

Level of restrictiveness of environment at discharge remained generally very positive across program types (see Table 6). When same and less restrictive environments are combined, 8 in 10 children in residential care programs were placed in a less or similarly restrictive environment. About three fourths of children in foster care and home-based programs were placed in similarly restrictive environments at discharge, whereas in transitional living programs, approximately two thirds of children were placed in similarly or less restrictive settings. In general, at the follow-up assessment, the majority of children in all programs were living in environments that were similarly restrictive as or less restrictive than the ones from which they had been discharged.

Overall, consumer satisfaction with services remained quite high. In all program types, children generally reported somewhat lower levels of satisfaction with services than parents or referring agencies. Over the 5 years of data collection, satisfaction reported by youths averaged around 5 (on a 7-point scale) across program types. Average level of satisfaction for parents and referring agencies was around 6 on the 7-point scale, although reported satisfaction was highest for home-based programs (Jackson-Walker & Wall, 1999, 2000, 2001, 2002, 2003).

One of the goals of the Outcome Project has been to monitor trends in outcomes over time.

To facilitate the tracking of trends and changes over time, the measures utilized to collect outcome data stayed consistent over the years, which more readily permitted the analysis of changes in the larger societal environment. For example, in both residential care and foster care programs, termination of both parents' rights appears to be increasing over time (Jackson-Walker & Wall, 2003), possibly due to the recently enacted Adoption and Safe Families Act of 1997 (see U.S. Department of Health and Human Services, 2000). It is important to continue to monitor sociopolitical factors such as these and to begin to explore whether these changes coincide with changes in treatment planning or outcomes.

Continued Expansion of Project

The Outcome Committee has continued to meet to develop further ideas about methods of service evaluation. In 2001, a proposal with a key priority of program improvement among IARCCA member agencies was established. Overall, the goals of the proposal focused on identifying methods for effectively delivering services to this population and for using this knowledge to expand services offered and induce systemic change. In addition, a goal to educate providers on service delivery was born. The 3-year proposal was submitted to a private

funding source by the organization's educational branch, the IARCCA Institute for Excellence, Inc. Funding was awarded to expand the Outcome Project.

The expanded Outcome Project began in the spring of 2002. During 2002, an Outcome Project coordinator was hired to manage all functions of the project. This position facilitates communication with members of the board, member agencies, and staff of IARCCA. In addition, the Outcome Project coordinator works closely with the external program evaluators to facilitate data transmission and evaluation. The Outcome Project coordinator also presents findings to agencies and provides training to implement any changes in the project.

In addition to the selection of the Outcome Project coordinator, one of the grant's first-year goals was to expand the project through further research. Data from Years 1999 through 2002 have been coalesced into a matched data sample, which consists of children for whom both intake and discharge information has been collected; this has been completed for residential care, foster care, and transitional living programs, and the home-based programs are in process. Because of the nature of children served in crisis stabilization and shelter care programs and the method of data collection, data from these programs are not being coalesced.

The development of these data sets has allowed for in-depth analyses. These analyses, in turn, allow for the identification of risk factors and their relationship with outcome variables. For example, an investigation examining the relationship between ethnicity, the presence of individual and familial risks, and treatment outcomes found that in many instances, minority children present with risk and protective factors that are unique when compared with children of majority ethnicity (Jackson-Walker, Wall, & Minnich, 2003). In this investigation, minority children in foster care were more likely to have negative educational outcomes as compared with Caucasian children, $\chi^2(1, N = 597) = 5.59, p < .05$. There was a trend for minority children in residential care programs to have more negative outcomes in restrictiveness of environment at discharge than Caucasian children, $\chi^2(1, N = 2,842) = 4.04, p < .05$. There were a number of factors for which there were significant relationships between risk fac-

tors and outcomes for one group but not the other. For example, although physical abuse, sexual abuse, and domestic violence were all risk factors for more negative outcomes for Caucasian children in residential care programs, they were not for minority children. However, the reverse was found in foster care. In foster care, physical abuse and sexual abuse both were risk factors associated with negative outcomes for minority children but not Caucasian children. Although these relationships are not straightforward and are likely affected by multiple factors operating outside of the service arena, they demonstrate that factors such as the child's abuse experiences, ethnicity, and treatment or placement history all potentially impact success in treatment. This type of finding highlights the need to consider carefully the total context of the child when making service delivery decisions and developing best practices for treatment.

Understanding the participants' receipt of service, presenting risk factors, and subsequent outcomes becomes especially important because the overall goal of future analyses continues to be looking at how individual and treatment variables relate to outcomes. If these factors can be more firmly delineated, best practices may be determined. Although these results are just the beginning of understanding programmatic outcomes, they demonstrate that exploring issues such as diversity may represent opportunities for program modification and service development. The specific goals of the Outcome Project are to expand and improve data collection, including the development of electronic data collection software. At present, an interfaced instrument designed to collect information from member agencies via software format is in development and is currently in the beta version. This program—along with other services, including agency-staff training and consultation services on outcomes measurement and paper methods of data collection and analysis—is available to interested parties. Income from these services and materials offers sustainability to the Outcome Project.

Summary and Implications

Overall, it has been demonstrated that a large outcome evaluation project is feasible with the support of many stakeholders. Through analy-

ses to date, an understanding of the complexity of problems presented by youths, their families, and the system has begun to develop. Parental risk factors include parent incarceration, parent use of illicit substances, parents who have been given psychiatric diagnoses, and parents with rights terminated. These children also present with histories of physical, sexual, and emotional abuse, academic challenges, and psychiatric diagnoses. Even so, participation in out-of-home treatment appears to produce positive results in that the majority do not return to the legal system after treatment, remain in school, and, when old enough, obtain employment. To maximize these outcomes, it is important to understand individual children and the risk factors with which they present.

Although results presented in this article represent preliminary findings, it is evident that the children and families presenting to IARCCA member agencies have complex problems that have developed out of difficult situations. It is the goal of IARCCA and the external program evaluators to continue data analysis, to ascertain specific risk factors that are present in different programs, to identify how programs best serve to remediate these risk factors, and to develop models for working with families to improve the lives of all concerned. This will be done through an exploration of children/youths receiving services in residential care, foster care, transitional living, and home-based programs, looking for factors related to improvement over the course of treatment.

One method of continued exploration is examining individual risk factors. Specifically, identification of the groups of factors that coalesce is planned, and a cluster analysis of individual risk factors in selected program types is already underway. In addition to exploring what risk factors are present and how these factors relate to treatment success, a review of children who are administratively discharged from programs is planned. This review will attempt to identify any significant risk factors that are evident so that problems may be identified at referral and addressed during treatment. Another area to explore involves satisfaction with treatment services and how satisfaction relates to outcome. There is a dearth of literature that examines how youths view the treatment that they are ordered to attend. These perceptions will be compared with those of parents and

placement agencies to identify whether or not there are subgroups of children that respond differentially to treatment, as this information could be useful for service provision (i.e., informed practices model).

In addition to exploring these youth-related variables, there will be continued analysis of the assessment instruments developed for this project. These projects are also underway, and they will explore topics such as the psychometric properties of outcome measures, including establishing convergent and discriminant validity of these instruments.

Lastly, factors related to the treatment environment will be explored. The majority of research on out-of-home care has emphasized the characteristics of children over the characteristics of the treatment environment (Colton, 1990). Consequently, a continued goal is to analyze programs by the actual services provided to more clearly identify the active ingredients of change. This should be very useful in determining the types of placement and services that would be most beneficial for each child and subsequently lead to improved service provision for all children.

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