City of Albuquerque
Youth Development Incorporated Child and Adolescent Early Intervention "Family Therapy Project"
Program Evaluation
Final Report

Prepared for:
The Department of Family and Community Services
The City of Albuquerque

Prepared By:
Institute for Social Research,
University of New Mexico
Paul Guerin, PhD
Linda Lewis, M.A.
Cynthia Torres, B.A.

May 2007

BACKGROUND AND INTRODUCTION

Beginning in Fiscal Year 2005, the City of Albuquerque appropriated substantial new funding to expand behavioral health services and prevention and early intervention services targeting high risk youth, using evidence-based practices or promising programs identified in the scientific literature. As part of this new initiative, funding was allocated to establish an Assertive Community Treatment Program for persons with serious mental illness, a Child and Adolescent Early Intervention Program, a Day Treatment Program for adolescent substance abusers, and a "Housing First Program" for adults with behavioral health disorders.

In providing funding for these services, the City Council directed that the Department of Family and Community Services conduct a rigorous evaluation to determine the effectiveness of these efforts in improving the lives of the clients and reducing involvement of these clients in criminal activity and other behavior that threatens, or is perceived by the general public, to threaten public safety. As the Division of Behavioral Health has responsibility for the provision of substance abuse services and care for the mentally ill, management of the evaluation contract is under the administrative purview of the Division of Behavioral Health, within the Department of Family and Community Services.

In August 2005 the Institute for Social Research (ISR) at the University of New Mexico was awarded the evaluation contract. For the review of the Child and Adolescent Early Intervention Program and the Day Treatment Program for adolescent substance abusers, ISR engaged Linda Lewis, M.A, President, Center for Progressive Policy and Practice, Incorporated, a consulting firm experienced in the delivery and evaluation of substance abuse treatment and prevention services.

Youth Development Incorporated, Family Therapy Project

The City's contract for child and adolescent early intervention services was awarded to Youth Development, Incorporated (YDI). YDI originally opened as an outreach organization for teen dropouts in the Albuquerque metropolitan area. Today YDI services include a crisis shelter, group homes, residential treatment centers, youth employment programs, alternative education programs, health education programs, and school-to-work transition programs.

For the Early Intervention Program, YDI proposed to "continue its Family Therapy Project" characterized as "an evidence-based clinical program replicating the Brief Strategic Family Therapy (BSFT) model." The program is intended to provide clinical assessment, case management, and family therapy for children and youth ages 6-17 and their families. Eligible families may receive 10-12 family therapy sessions to address issues such as communication, behavioral problems and substance use. Case management was to be provided as well. A total of 108 families were projected to be served. Families referred to the program include children and youth exhibiting high risk behaviors such as substance use, delinquent behavior, running away, and school problems. To assess clients' progress, YDI is using the Children's Functional Assessment Rating Scale (CFARS) and the North Carolina Family Assessment Score or NCFAS. These performance outcome measurements are administered at the beginning of therapy and at the end of the therapeutic intervention, defined as the family's last session.

RESEARCH DESIGN

The basic design of the evaluation research project to be conducted by ISR included the items described below. Data from these sources was automated and/or, analyzed and used to develop this report to the City's Division of Behavioral Health.

- *Literature Review* - Literature reviews conducted of model early intervention programming and of the Brief Strategic Family Therapy model of services are referenced throughout the report, and are provided as attachments to this report.

- *Client Records Review* - ISR researchers conducted a thorough review of program records for youth/families admitted to the Family Therapy Project during the period March 2005 through December 2006. Data collected from program records is reported in the Data Analysis section below and referenced in the Discussion section of the report.

- *Staff Interviews* - Interview instruments were designed for the project and approved by the University of New Mexico Institutional Review Board for use in this evaluation research project. Three staff interviews were conduct at YDI. These include the Clinical Director, the Case Manager, and a Clinical Therapist. Pertinent information relative to the professional staff conducting the Family Therapy Project is provided.

- *Compliance Assessments* - Researchers reviewed the City of Albuquerque applicable contract requirements for early intervention programs (Minimum Treatment Standards; use of American Society of Addiction Medicine (ASAM) criteria; MADAD and/or other diagnostic assessment tools, etc.) to assess the program's compliance with these contractual requirements.

The final section of the report contains a Discussion and a set of Recommendations based on evaluation findings.

DATA ANALYSIS

This section of the report contains several parts that focus on reporting data collected for the evaluation. First, we include a review of client level data. Second, we review staff information that includes an analysis of staff interviews. Third we review program level information that includes a review of records maintained by the City of Albuquerque.

Client Level Data Analysis

This section contains a review of client level data collected focused on describing youth referred to and served in the YDI's Family Therapy Project between March 2005 and December 2006. During this time period 162 individuals were served in the program. At the time we collected information on these clients (March 2007) the program had 29 active clients. Table 1 reports the referral source information for these individuals.

Referral and Intake Information

The first set of tables discusses referral and intake information. Information discussed includes referral source, the number of referrals by time frame, basic demographics (age, sex, and ethnicity), areas of town where clients lived, client characteristics related to behavioral problems, client needs, and client treatment/service goals.

Table 1 – Referral Source		
	Count	Percent
School	30	21.1
Community Agency	10	7.0
YDI	7	4.9
Flyer	10	7.0
Family/Self	48	33.8
Government Agency	4	2.8
Other	33	23.2

Missing - 20

One-third of all referrals were from families, followed by others (23.2%), and schools (21.1%). These three sources accounted for almost 80% of all referrals. The "other" category included friends and numerous individual names which we could not categorize. On average there were 48 days from referral to intake.

The program also collected information on the referral reason. Referral reasons varied widely and could not be categorized. Common referral reason themes included problems at home related to drug use in the family (not always the referred client), and conflict among household members (e.g. verbal and communication) and problems at school (e.g. bad grades, missing school, and behavioral problems at school).

Of some interest is that on the same date in early 2006, 11 (6.7% of all clients) elementary school aged individuals were referred from a single elementary school for the same reason. They all had the same intake date, had the same single goal, received the same number of services on the same dates, spent the same length of time in the program (60 days), had the same discharge date, and had the same discharge reason.

Table 2 – Referrals by Quarter		
	Count	Percent
April 2005 – June 2005	14	8.8
July 2005 – Sept. 2005	27	16.9
Oct. 2005 – December 2005	22	13.8
Jan. 2006 – March 2006	31	19.4
April 2006 – June 2006	19	11.9
July 2006 – Sept. 2006	18	11.3
Oct. 2006 – December 2006	19	11.9
Jan. 2007 – March 2007	10	6.3

Missing - 2

This table reports the number of referrals in three month time intervals. As expected the program experienced fewer referrals in the first quarter than most subsequent quarters. Beginning in the fifth quarter that began in April 2006, the program experienced a reduction in referrals. The fewest number of referrals occurred in the last quarter (January 2007 – March 2007).

Table 3 – Demographics		
Variable	Count	Percent
Age		
Average Age	11.6	
Sex		
Female	87	55.8
Male	69	44.2
Race/Ethnicity		
Anglo	32	20.1
Hispanic	98	61.6
American Indian	10	6.3
African American	5	3.2
Other	14	8.8

Average age of clients was almost 12 (range 6 to 17 years of age). Several clients with suspicious ages were dropped from the analysis. This included one individual aged 22 and 6 individuals who were 0 to 4 years of age. Females comprised a small majority of clients and Hispanics were almost two-third of all clients. The Other ethnicity includes those who identified as multi-racial.

Table 4 – Residence Area of City		
	Count	Percent
NE	30	30.3
SE	20	20.2
NW	17	17.2
SW	32	32.3

Missing - 20

This table reports the areas of the City by quadrant in which the clients resided. The largest number of clients lived in the southwest followed by the northeast. All clients lived in Albuquerque.

Table 5 – Target Population Characteristics		
	Yes	Percent
Behavior Problems at School	57	38.5
Behavior Problems at Home	59	36.4
Substance Use Problem	15	9.3
Non-Compliant with Parents	24	14.8
Parenting Issues	62	38.3
Negative Peer Associations	13	8.0
Family Relationship Problems	80	49.4
Anger Management	53	54.1

Missing – 14

As part of the program assessment information was collected on the problem characteristics of the targeted population. On average clients had 2.2 of the listed characteristics (range 0 – 8). Slightly more than 50% of the clients had anger management problems. This was followed by family relationship problems, behavior problems at school, parenting issues, and behavior problems at home.

Table 6 – Target Population Needs		
	Yes	Percent
Housing	50	30.9
Medical	48	29.6
Transportation	28	17.3
Mental Health	22	13.6
Employment	29	17.9
Religious	5	3.1
Educational	67	41.4
Clothing	38	23.5
Recreational	25	15.4
Financial	37	22.8
Social	32	19,8
Legal	29	17.9

The program also collected information on target population needs. On average clients had 2.5 of the listed needs (range 0 – 12). The largest number and percent of clients had educational needs (41.1%), followed by housing (30.9%), medical (29.6%), clothing (23.5%), and financial (22.8%) needs.

Table 7 – Number of Goals		
	Count	Percent
One	32	19.8
Two	27	16.7
Three	52	32.1
Four	11	6.8
Five	13	8.0
Six	17	10.5
Seven	1	0.6
Eight	2	1.2
Nine	0	0.0
Ten	1	0.6

Missing - 6

Based upon the needs of the clients and their families (Table 5) and the characteristics of the clients (Table 6) treatment goals were designed for the clients. On average clients had 3.1 treatment goals and according to program records clients reached an average of 2.6 treatment goals. More than two-thirds of the clients had three or fewer goals. Because of the variety of goals it was not possible to categorize the goals. In a review of the goals common themes

centered on the problem characteristics described in Table 5, common goals included: improved communication, increased and improved parental authority, and increased problem solving skills.

Treatment/Service Information

The next set of tables only includes clients who have been discharged from the program. Active clients were excluded because they have not yet received all the services they might and including them in this section would under-report services.

Table 8 – BSFT Sessions and Number of Hours of Services

	Median	Range
Treatment Sessions	9.0	0 to 19
Treatment Hours	11.25	0 to 26.75

Table 8 reports the median number of BSFT treatment sessions and median number of treatment session hours for discharged clients. Thirteen clients were either missing treatment session information or received no services. One client received 19 treatment sessions and on median, clients received 9 treatment sessions.

The next two tables further describe the number of treatment sessions and treatment hours.

Table 9 – Number of Hours of BSFT Treatment by Time

	Count	Percent
None	13	9.8
1 or less	3	2.3
1 to 5	25	18.8
5 to 10	19	14.3
10 to 15	31	23.3
15 to 20	19	14.3
20 to 25	19	14.3
25 or more	4	3.0

This table further describes the number of BSFT treatment hours. As noted in Table 9, thirteen clients received zero hours of treatment. The largest number and percent of clients received 10 – 15 hours of treatment. Only 4 clients received 25 hours or more of treatment.

Table 10 – Number of Sessions of BFST Treatment

	Count	Percent
None	13	9.8
1 to 5	36	27.1
6 o 10	55	41.4
11 to 15	23	17.3
16 to 20	6	4.5

Slightly more than 40% of the clients received 6 – 10 treatment sessions and 6 clients (4.5%) received 16 – 20 treatment sessions.

Table 11 – Case Management Services and Other Services			
	Average	0	1 or more
Case Management Sessions	3.9	31	89
Phone Calls by Therapist	5.0	48	83
Number of Letters Written by Therapist	.46	89	41
Number of Other Tasks Completed by Therapist	1.1	91	37

This table reports case management services and other services provided by the program. On average clients received almost 4 case management services. Thirty-one clients received no case management services and 89 clients received one or more case management services. Slightly more than 50% of those who received case management services received 1 - 4 services and four clients received 20 or more case management services. Therapists also made an average of 5 phone calls, wrote an average of .5 letters and completed on average 1.1 other tasks.

Table 12 – Reviews		
	Average	1 or more
Individual	1.1	62.7
Team	0.5	37.0
Quarterly	1.0	69.8
Total	2.5	85.2

Program staff also conducted client review as shown in Table 12. In total clients received an average of 2.5 reviews; 1.1 individual reviews, 0.5 team reviews and 1 quarterly review.

Discharge Information

This section reports discharge information including reasons for discharge, treatment goals reached, and some CFARS information. This section, like the treatment/services section, only reports on individuals who are discharged and so it does not include information on the 29 clients who were still active at the time we completed data collection.

Table 13 – Discharge Reason		
	Count	Percent
Completed Treatment Goals	88	75.2
Moved Out of Service Area	1	.9
Barriers to Treatment	16	13.7
Client/Family Non-Compliant	12	10.3

Missing - 16

Slightly more than 75% of all clients with a discharge reason completed their treatment goals. Sixteen clients who had a discharge date were missing the reason for discharge.

Table 14 – Goals Assigned Compared to Goals Reached		
	Count	Percent
Reached Goals	66	60.0
1 Goal Left	20	18.2
2 or More Goals Left	24	21.8

Missing – 23

This table compares the number of goals assigned to the number of goals reached. Sixty-six (60%) of the clients reached their goals and the remaining 40% did not reach all of their assigned goals. Of those who did not reach their assigned goals 21.8% had two or more goals they did not reach or complete prior to discharge.

Twenty-three individuals were either missing the number of treatment goals assigned, the number of treatment goals reached or a negative number of goals were reached meaning the number of goals reached was greater than the number assigned. Because this cannot logically occur these cases were excluded from the table.

Table 15 – Number of Treatment Goals Reached		
	Count	Percent
None	20	18.2
One	26	23.6
Two	13	11.8
Three	28	25.5
Four	3	2.7
Five	7	6.4
Six	11	10.0
Seven	1	0.9
Eight	0	0.0
Nine	0	0.0
Ten	1	0.9

Missing - 23

This table further describes the number of treatment goals reached by providing a count of the number of treatment goals completed. Almost 20% of the clients who had sufficient information did not reach any of their treatment goals.

Table 16 – CFARS Intake to Follow-up					
	Average Intake	Average Followup	Increase	Decrease	Even
Depression	2.2	1.6	38	3	69
Anxious	2.2	1.7	34	7	66
Hyperactivity	1.8	1.5	17	4	89
Thought Process	1.7	1.4	20	5	84
Cognitive Performance	2.3	1.8	38	12	58
Medical/Physical	1.5	1.4	16	6	87
Traumatic Stress	2.9	2.3	45	11	58
Substance Use	1.6	1.3	13	2	93
Interpersonal Relationships	3.0	2.0	55	8	47
Behavior in Home Setting	3.2	2.3	46	16	46
Intake ADL Functioning	1.7	1.4	38	3	69
Socio-Legal	1.4	1.4	38	3	69
Work/School	2.8	2.0	38	3	69
Danger to Self	1.5	1.4	38	3	69
Danger to Others	1.5	1.3	38	3	69
Security/Management Needs	1.5	1.3	38	3	69

As part of the program the staff routinely administered the Children's Functional Assessment Rating Scale (CFARS) at intake and at follow-up. The CFARS is designed to provide a snap shot of client functioning and generates problem severity rates using a scale of no problem (1), slight problem (2), moderate problem (3), severe problem (4) and extreme problem (5).

This table reports the average scores at intake, follow-up and the number of clients who had increased scores, decreased scores and even scores. Decreases in scores indicate improvement, increases in scores indicate a worsened condition and even scores indicate a neither improved nor worsened condition.

Four problem areas (interpersonal relationships, behavior in home setting, traumatic stress, and work/school) had average scores of almost 3 or higher indicating a moderate problem. The remaining problem areas had average scores between 1 (no problem) to slightly greater than 2 (slight problem) indicating these problem areas for the majority of clients were not severe.

Fifteen of 16 average scores indicate improvement from intake to follow-up and one score did not change. These average changes while positive are small.

The table also provides information on the number of clients who had increased scores, decreased scores and scores that did not change from intake to follow-up. The largest number of

clients in almost all problem areas experienced no change in problem area scores. The smallest number of changes occurred as decreases in scores in every problem area.

A preliminary review of the CFARS scores from intake to follow-up shows that all but one of the 16 problem areas showed a decrease in the average score. The majority of these decreases were small and only two problem areas (interpersonal relations and work/school) showed larger decreases of one or close to one. Increased scores and scores that did not change (even) comprised the largest number of cases which indicates the majority of clients either did not experience a change in the problem area or their severity score increased indicating a worsened problem. Both average increased scores and decreased scores were relatively small from intake to follow-up

Follow-up Information

The next section reports follow-up information collected by program staff. Information includes one and three-month follow-ups, client surveys and adult surveys.

Table 17 – One and Three Month Follow-ups

	Completed	Attempted	Not Attempted
One Month Follow up	77	12	33
Three Month Follow up	52	12	51

One month follow-ups were completed on 77 clients and three month follow-ups were completed on 52 clients. The follow-ups consisted of a series of questions asking the client how they were doing and the responses from the clients were in text. Because of time and resource limitations we decided not to collect, code and analyze the follow-ups. This may be useful to complete later. Follow-ups were either completed in person, on the telephone, or as a collateral survey.

Table 18 – Youth Client Satisfaction Survey

	Average Score
The program is helping me	4.5
I learned things in this program that will help me	4.5
Staff told me why I was in this program	4.5
My family is getting along better now	4.3
I reached the goals I set for myself	4.3
The staff listened if I had a question	4.7
I could trust the staff	4.8
If I had a problem in the future, I would use this program again	4.8

The program also completed a satisfaction survey with clients at the time of the discharge. Twenty-four client satisfaction surveys were completed and 30 adult client satisfaction surveys were completed. The following reports the results of the surveys. The client satisfaction survey contained 8 questions using a 5 point Likert scale (strongly agree [5], agree [4], neutral [3], disagree [2], strongly disagree [1]) with a not applicable option.

As indicated in the table the average score for all clients for all questions was between agree and strongly agree.

Table 19 below reports average scores for adults who were surveyed for the Family Therapy Project.

Table 19 – Adult Client Satisfaction Survey	
	Average Score
The program is helping me	4.6
I learned things in this program that will help me and my children	4.8
I was able to get the services I thought I needed	4.8
My family is getting along better now	4.6
I reached the goals I set for myself	4.3
The location of services was convenient and easy to access	4.6
Staff was willing to see me as often as I felt necessary	4.8
If I had a problem in the future, I would use this program again	4.9
I was given the opportunity to participate	4.9
I was treated with respect and dignity by all the agency's staff	5.0

Adult Client satisfaction Survey includes 10 questions using the same 5 point Likert scale as the youth survey with a not applicable option. Similar to the responses for the client survey the average score on all questions was between agree and strongly agree.

Program Staff Interviews

Three staff members at the Family Therapy Project were interviewed for this report. Staff interviews reflect the majority of individuals working in the Family Therapy Project have long standing experience in providing clinical counseling and social services. Clinical staff interviewed have over 20 years of experience in working in the drug and alcohol field and/or with youth and families. For staff interviewed, employment at YDI ranges from as many as 16 years to as few as six months. Both professional clinical staff interviewed have Master's Degrees. One staff member interviewed has a Bachelor's Degree. Staff supervision for the project is provided by a staff member with clinical expertise.

Both clinical staff interviewed have current and proper credentials for their positions, as required by the City of Albuquerque and established by the New Mexico Counseling and Therapy Practice Board. Specific credentials are not required for Case Manager positions.

Project staff interviewed had received training in the use of Brief Strategic Family Therapy which is the evidence-based treatment model used by the project. Training was also provided on the CFARS evaluation tool. One staff member in a supervisory role is certified as a CFARS trainer. Both clinical staff interviewed have attended numerous trainings over the past several years in BSFT and other therapeutic models of care. Training attended was a combination of in-

service training provided by YDI and training provided through federal agencies and Addiction Technology Transfer Centers.

The clinical staff member interviewed carried a caseload of 23 clients on the day of the interview (4/28/07). The third staff member interviewed for this report has been employed at YDI for approximately six months, but has worked in the alcohol and drug field since 2000. Education includes a Bachelor's Degree in Psychology. Some orientation to the BFST model has been provided but this staff member has not had formal training in the use of the CFARS or NCFAS tools.

DISCUSSION

The Youth Development, Incorporated Family Therapy Project is intended to provide early intervention programming for high risk youth and families to "strengthen family resiliency, improve communication and prevent/decrease involvement in high risk behaviors." The project served a total of 162 youth between March 2005 and December 2006. Based on staff interviews, youth are referred to the Family Therapy Project from a variety of sources including schools, probation officers, community centers, self-referrals, and some come as a result of flyers distributed about the program at local grocery stores and churches.

Target Population Description

According to the YDI response to the RFP for early intervention programming the project intended to serve 108 clients/families in each of two fiscal years (FY06 July 2005 – June 2006 and FY07 July2006 – June 2007). The total number of clients served was 162 or 75% of the target. Because our report does not go through the end of the second fiscal year and the fact some clients cross fiscal years the number and percent served for the two fiscal years will be greater than the 75% reported here.

As shown in Table 1, one-third of all referrals were Family/Self referrals followed by others (23.2%), and schools (21.1%). These three sources accounted for almost 80% of all referrals. Community agencies, government agencies, and other YDI programs were also sources of referrals to the project. To recruit youth into the program, YDI staff distributed flyers throughout Albuquerque (grocery stores, churches, etc.) to inform parents of the Family Therapy Project and that services were available at no cost. Seven percent of referrals came from persons who had seen the flyers. Twenty-three percent of referrals came from the "other" category which included: friends or individual names that could not be categorized. Table 4 reflects that all clients referred to the program had Albuquerque addresses, with the largest number of enrolled clients living in the southwest section of Albuquerque.

Fifty-six percent of youth served were female, slightly higher than males served at 44% Racial and ethnic characteristics included 20% Anglo, 62% Hispanic, 6% American Indian, 3% African American and 9% "other" which is primarily persons who identified as multi-racial.

Young people enrolled in the Family Therapy Project presented for early intervention services most often due to family relationship problems, behavior problems at school and/or behavior problems at home. Parenting issues was also a common problem identified. Nine percent of youth were characterized as having a substance use problem, and eight percent were considered

to have negative peer associations. Over half (54.1%) of the clients admitted to the program presented with anger management issues.

Clinical Services

The clinical services to be provided, as identified in the YDI proposal's goals and objectives, included "clinical services for children and youth, age 6-17 and their families using the Brief Strategic Family Therapy Model". Additionally, the project intended to "provide family therapy for a total of 108 families with 90 percent completing a minimum of 10 sessions." Finally a total of 81 families or 75% of the anticipated 108 clients to be served were projected to receive case management services "including assistance with basic needs such as housing, employment, health care, day care, educational services, job preparation, job placement and other resources within YDI and through referral to other organizations."

YDI proposed to use the Brief Strategic Family Therapy (BSFT) evidence-based program to work with high risk youth and their families referred to the Family Therapy Project. As described in the Literature Review, "BSFT is meant to be used with adolescents between 8 and 17 who display or are at risk for developing behavioral problems including substance abuse." The basic goal in applying BSFT is to "improve family relationships that are presumed to be directly related to youth behavior problems, and to improve relationships between the family and other important systems that influence the youth (e.g., school, peers)" (Robbins/Szapocznik, 2000). Based on data collected that describes the clients seen in the Family Therapy Project (Tables 5 and 6), BSFT appears to be an appropriate early intervention service model for this population.

The BSFT research is built on the concept that each family has its own unique "system" of functioning and its own "structure" which refers to the repetitive pattern of interactions that characterize a family system. BSFT is intended to target the interaction patterns (i.e., the habitual ways in which family members behave with one another) that are directly related to the youth's behavior problems. In interviews with YDI clinical staff, they are pleased with the structure of the BSFT as a therapeutic intervention for this early intervention client population. According to the literature review, BSFT "incorporates interventions that are practical, interventions that are problem focused, and interventions that are well planned, meaning that the therapist determines what seem to be the family interactions that are directly related to the youth's behavior problems, determines which of these might be targeted, and establishes a plan to help the family develop more effective patterns of interaction." YDI clinical staff view the BSFT approach as "effective" and like the family-driven, problem-focus approach that is characteristic of the BSFT model.

Of interest is the fact that, in general, clients in the Family Therapy Project do not receive a formal "diagnostic assessment" as would be expected in a program providing more traditional substance abuse or mental health treatment services. However, after working with the project for some time, staff have determined that a more "formal" assessment process would be helpful. Pam Aldridge, Clinical Therapist is working on developing a "Strategic/Structural Assessment Scale" that will look at diagnosis in five areas: Conflict Resolution, Organization, Residency, Childhood, and Developmental Relationships.

The YDI narrative intended that 90 percent of the clients would complete a minimum of 10 family therapy sessions. Data from Table 8, based on records for clients discharged from the

program, reflects the median number of treatment sessions was 9.0 and the median number of treatment hours was 11.25 ranging from 0 to 26.75. Table 10 shows that fifty-five clients or just over 41% received from 6 to10 sessions of the Brief Strategic Family Therapy. Twenty-three clients or 17% received between 11 and 15 BSFT sessions. Thirty-six clients received between and one and five sessions and six clients received between 16 and 20 sessions. Clearly, the majority of clients received 6 to 10 sessions or more indicating good client and family engagement. Thirteen clients were either missing treatment session information or received no services.

Nearly a quarter (23.3 percent) of YDI Family Therapy Clients received 10 to 15 hours of treatment. Fourteen percent received 15 to 20 and 20 to 25 hours of treatment each.

Staff also report the use of home-based services to a limited extent. Home-based services include therapy and case management; therapy has also been provided at school. Home-based services are limited so as not to be "intrusive" with the family.

Case Management Services

In addition to needing early intervention counseling services, clients and their families coming into the Family Therapy Project presented with significant needs for basic services such as food, clothing and shelter (Table 6). The largest number and percent of clients had educational needs (41.4%) followed by housing (30.9%), medical (29.6%), clothing (23.5%), and financial (22.8%) needs. Nearly 14 percent of clients/families had needs for mental health services, and 18 percent had need of legal services. Nearly 18 percent of families needed help with employment. These data point out the importance of the case management services to be provided as a part of the Family Therapy Project.

Data from Table 11 reflects that clients received an average of 4 case management services per client. Thirty-one clients or 26% received no case management services and 89 clients or 74 percent received one or more case management services.

According to staff interviews conducted for this review, YDI provides case management services for Family Therapy Project clients as shown in the chart below:

Case Management Service	Method of Service Provision
Comprehensive assessment/diagnosis	Assessment services have not been a part of the program (see note below)
Housing	Housing services are not provided
GED/other educational program	Provided in-house by YDI's GED program
Job training	Provided at YDI
Self Help or Mutual Help Groups	N/A
Individual Counseling	Some individual counseling is provided
Family Counseling	Provided by the Family Therapy Project
Relapse Prevention Groups	N/A
Aftercare Services	Rarely provided by the Family Therapy Project
Health Care	YDI facilitates access to Medicare, dental, glasses, etc.
Transportation	YDI provides transportation/bus schedules
Vocational Counseling	YDI refers to Vocational Rehabilitation
Employment Services	YDI assists client in how to interview for a job
Child Care	YDI does not provide
Group Counseling	YDI does not provide
HIV/AIDS education/counseling	N/A
Other	Legal advocacy

Staff also reported community agencies and organizations with which YDI collaborates to provide support services for clients. These included: YDI food program; Road Runner Food Bank; State Human Services; Housing Authority, etc. YDI also participates in gang intervention and assists students in getting jobs, refers persons to First Choice and UNM Hospital for medical services and to the Medicaid office for benefits.

Client performance is reviewed at YDI through individual client reviews and team reviews. Team members include Clinical Therapists, the Case Manager and the Clinical Supervisor. Records reviewed for this evaluation showed that clients received an average of 5 team reviews and 1.1 individual reviews.

Program data also provides information on the reasons for clients discharged from the program. Eighty-eight clients with a discharge reason completed their treatment goals. Table 15 reveals that twenty-eight clients were discharged for non-compliance or barriers to treatment which included situations in which the client is unable to make the session. Examples include lack of transportation or parents' work schedules.

Program Evaluation

YDI identified two evaluation tools that would be used as the primary outcome measurement tool for youth served in the Family Therapy Project. These included the Children's Functional Assessment Scale (CFARS) and the North Carolina Functional Assessment Scale. These measurement tools were to be administered "at the beginning of therapy and at the end of the therapeutic intervention, i.e. at the family's last session." Additionally, the project used a Youth Client Satisfaction Survey and an Adult Client Satisfaction Survey to assess overall client/family satisfaction with the program.

CFARS/NCFAS
For purposes of the ISR Evaluation for the City of Albuquerque Division of Behavioral Health, important questions relative to the Family Therapy Project include:

1. Is the CFARS instrument being applied consistently to program participants?
2. Is there documented evidence of one or more program personnel who have completed training in the CFARS instrument?
3. How is CFARS data being used to deliver services and/or improve client outcomes?

As discussed in the Literature Review, the CFARS is a "multi-domain" functional assessment considered a valid and reliable way to document effectiveness of functioning separately for Cognitive, Behavioral, Physical/Medical, Interpersonal, Social and Role domains. CFARS is designed to assess the level of severity at which a child is experiencing difficulty or impairment in a variety of domains that assess cognitive or behavioral (social or role) functioning. The need for or admission into behavioral healthcare services usually indicate impaired functioning in one or more domains. *Discharge from treatment (or early intervention services) usually follows restoration or improvement in functioning in those domains.*

Both clinical staff interviewed have received training in the CFARS tool. In fact, the Clinical Supervisor is certified as a CFARS trainer. CFARS data was administered in the Family Therapy Project at the point of intake and at follow up. Data from the CFARS is reflected in Table 16 and shows that improvements were seen in the average score of all but one of the sixteen problem areas listed. However, the majority of decreased scores indicating client improvements were small, and did not indicate significant improvement. The majority of clients experienced no change in problem area scores.

The NCFAS assesses family functioning across a six point scale examining a set of five domains in which to rate child and family problems and their resolutions. As the NCFAS is a complex instrument and is not well used in the Family Therapy Project, it was determined that we would not provide detailed information on this tool. However, 138 of 162 clients received an intake NCFAS and 92 of 132 clients eligible for a follow-up had one completed.

Client Followups
The follow-ups consisted of a series of questions asking the client how they were doing and the responses from the clients were in text. Because of time and resource limitations we decided not to collect, code, or analyze the follow-ups. This may be useful to complete later.

Youth/Adult Client Satisfaction Surveys
As a part of the Family Therapy Project's efforts to evaluate its services, a Youth Client Satisfaction Survey was administered to clients at the time of discharge. As shown in Table 18, twenty four surveys were completed by youth participating in the program. In general, youth responses to the program were positive. An Adult Satisfaction Survey was also administered to parent/family members of youth enrolled in the program. Thirty adult surveys were completed. Again, results indicate that adults completing the surveys were positive about the program.

Compliance with City Contractual Requirements
Applicable contractual requirements were limited to the City's standard fiscal/administrative monitoring requirements. Appropriate staff have current licenses as established by the New Mexico Counseling and Therapy Practice Board. ISR researchers did not review technical or fiscal administrative/contractual requirements for this program.

Based on several staff interviews there was a clear indication of a good understanding of Brief Strategic Family Therapy. Both staff with clinical responsibilities had been through training on the model, used the model, and saw the model as useful and appropriate for the early intervention clients.

RECOMMENDATIONS
The recommendations provided below are intended to highlight areas where changes in program organization and/or services may improve overall program functioning and client services.

Improved Case Management Services
Although the Family Therapy Project serves an early intervention population, data from the record reviews indicates a significant number of clients with individual and/or family needs such as education, housing, clothing and financial assistance. Clients/families also had needs for mental health services, legal services, and help with employment. However, clients/families only averaged 4 case management services. It may be helpful to broaden the range of community resources available for project participants and develop a "case management plan" for clients in the program. This may contribute to more substantial improvements in client outcomes.

Use of New Assessment Tool
The use of a more formal assessment of presenting problems, family functioning, and support services needed may also contribute to enhancing program services for clients enrolled in the Family Therapy Project.

Program Evaluation Tools
In New Mexico, the CFARS instrument is used by a number of state agencies which means that YDI must also use this tool. However, if neither the CFARS nor the NCFAS are perceived as useful program evaluation tools, it may be pertinent to replace them with tools that can be effectively and routinely used by clinicians, case managers, and supervisors in assessing client progress and in informing changes that may need to be made to the project.

Considerations for Future Research
Given the time constraints of the present evaluation contract (a period of 8 months from time of contract signing) the work presented here describes the "processes" that YDI uses to operate the Family Therapy Project. Future research that includes more in-depth analyses using multi-variate statistics to predict outcomes and profile clients could be useful to the City in developing a better understanding of who benefits from early intervention programming and in what manner. Additional information that could be collected and analyzed could include greater analysis of CFARS/NCFAS data as well as perhaps follow ups post-program with a sample of clients and families participating in the Family Therapy Project. There are also different levels of outcome including program level – satisfactory discharge vs. unsatisfactory discharge and post-program –

school performance, behaviors at home, drug use, etc., that could be examined. This report sets the stage for a true outcome study.

ISR appreciates the cooperation received from Youth Development, Incorporated and in particular, the staff of the Family Therapy Project in conducting this evaluation research project.

Literature Review
Hogares - CYT and Multi-Dimensional Family Therapy
YDI- Brief Strategic Family Therapy

Introduction

The Institute for Social Research (ISR) at the University of New Mexico is conducting an evaluation of two substance abuse programs serving adolescent and family populations. Literature reviewed for this evaluation project documents the evolution of the use of "evidence-based practices" in substance abuse treatment and early intervention service delivery and illuminates current thinking as to the most effective research to practice transfer methods. Additionally, studies were reviewed that provide information about the cognitive and behavioral changes found in adolescents who use and/or abuse illicit substances, in particular marijuana, as well as studies regarding the use of CYT/Multi-Dimensional Family Therapy and Brief Strategic Family Therapy as effective treatment and early intervention service models respectively, for adolescent substance abusers.

Historical Background

Beginning in the late 60's and through the late 90's, America has been confronted with the seemingly endless problem of substance abuse. Today, substance abuse continues to pose an enormous public health problem in the United States and around the world ((Krausz 2000; McArdle *et al*.2002). Throughout the 90's a significant hue and cry was heard from substance abuse treatment funding resources and political policy-making bodies (state governments, Congress, federal funding institutions) as to whether or not drug treatment really worked. Community-based providers and state substance abuse agencies scrambled to document the positive changes that occurred in persons who received drug treatment. Both the federal government and private research organizations began to engage in a variety of studies to determine the effectiveness of treatment. Major examples included the Rand Corporation study on controlling cocaine use which launched the Supply vs. Demand federal policy initiatives; the National Institute on Drug Abuse Treatment Outcome Studies (DATOS) begun in 1990, and followed by the National Treatment Improvement Evaluation Summary (NTIES); and several others. Some states funded extensive program evaluations to demonstrate effectiveness and cost savings as a result of providing treatment. Perhaps the best known example was the "watershed" CALDATA Study funded by the California Department of Alcohol and Drug Programs and conducted by the University of Chicago's National Opinion Research Center, which clearly demonstrated cost savings in the areas of criminal justice and health care for addicted populations receiving drug treatment.[1] In 1998 the General Accounting Office published a report on treatment effectiveness resulting from a review and synthesis of the largest and most comprehensive studies of drug treatment effectiveness concluding that "treatment was effective, but that self report data was less reliable than objective testing such as for urinalysis".[1] Measuring the effectiveness of treatment is controversial; it can be calculated both in terms of financial gains for society as well as the user's rehabilitation. However, despite variations in research methodologies, all recent studies have shown that treatment is effective. [2]

The negative effects that substance abuse can have on developing youth was first recognized in the early 70's when youth were first heavily involved in marijuana use and polysubstance abuse. James Anthony, Ph.D., chairman of the department of epidemiology at Michigan State University reported in 2005 that "the number of teenagers who experiment with recreational drugs is nearly the same as it was during its peak years in the early 1970s." The trend in the past decade has been approximately 2.5 million new teenage cannabis users each year, an almost identical number as was seen in the early 1970s. The first major study to assess substance abuse treatment services for adolescents was the Adolescent Drug Abuse Treatment Outcome Study or DATOS-A conducted between 1993 and 1995. "DATOS-A was a multi-site, prospective, community-based, longitudinal study of adolescents entering treatment. It was designed to evaluate the effectiveness of adolescent drug treatment by investigating the characteristics of the adolescent population, the structure and process of drug abuse treatment in adolescent programs, and the relationship of these factors with outcomes".[4] Data analyzed from DATOS-A confirmed positive gains for youth engaged in drug treatment including before and after treatment comparisons showing significant declines in the use of marijuana and alcohol, considered to be the major drugs of abuse for this age group. Weekly or more frequent marijuana use dropped from 80 percent to 44 percent, and abstinence from any use of other illicit drugs increased from 52 percent to 58 percent. Heavy drinking decreased from 34 percent to 20 percent, and criminal activity decreased from 76 percent to 53 percent. Adolescents also reported fewer thoughts of suicide, lower hostility, and higher self-esteem. In the year following treatment, more adolescents attended school and reported average or better-than-average grades. Some exceptions to the general pattern of improvement were that overall, cocaine and hallucinogen use did not improve during the year after treatment.[3] Researchers also determined that a key factor in treatment success was length of stay. According to a National Institute on Drug Abuse (NIDA) report, "Previous research indicates that a minimum of 90 days of treatment for residential and outpatient drug-free programs and 21 days for short-term inpatient programs is predictive of positive outcomes for adults in treatment. Better treatment outcomes were reported among adolescents who met or exceeded these minimum lengths of treatment than for those who did not."[3]

As research conducted throughout the past twenty years began to bear fruit, the question arose as to how best to transfer the benefits of research findings to the nation's community based drug treatment system. Early research conducted by NIDA and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) used the concept of "technology transfer" to share research findings. In 1998, the Institute of Medicine (IOM) was charged with "examining the community-based drug abuse treatment system with the goal of facilitating new strategies for partnerships and increasing synergy among those working in a variety of settings to reduce the individual and societal costs of drug addiction." [4] Following the subsequent report from the IOM, federal agencies began a process of developing mechanisms to enable research findings to be applied in community based treatment settings. Among the many federally supported mechanisms used were the creation of Addiction Technology Transfer Centers dispersed across the country, usually through university based programs; funding for Knowledge Dissemination Conferences to disseminate knowledge learned from research; and, the more recent "Blending Initiative" which partners the Center for Substance Abuse Treatment and the National Institute on Drug Abuse intended to bring the findings of research more quickly into actual practice.[4] Currently, some of the foremost researchers in substance abuse treatment are engaged with the

National Institute on Drug Abuse in its Clinical Trials Network which incorporates the work of 17 university-based research centers and over 120 community treatment agencies across the country.

As a part of this "research to practice" initiative, many states and local governments funding drug treatment and/or early intervention services began to require providers to use "evidence-based practices" in order to receive their funding. The City of Albuquerque was no exception and began to require providers applying to receive funding from the City to identify and document their use of best practices. The adolescent treatment program and the adolescent early intervention program participating in this ISR evaluation project selected treatment and intervention models found in the Cannabis Youth Treatment Study published in 2001 and the Brief Strategic Family Therapy model developed by the Spanish Family Guidance Center in Miami, Florida.

Literature Review on CYT

According to the Office of Applied Studies (OAS) at the Substance Abuse and Mental Health Services Administration (SAMHSA), marijuana is still the most widely used and most readily available illicit psychoactive substance in the United States. New Mexico state data reflects an average annual rate of marijuana use among persons 12 and over of 9.22 compared with 6.12 nationally.[6] To address the problem of marijuana use among teens, the Center for Substance Abuse Treatment (CSAT) funded research regarding the most effective means of impacting marijuana use in this target population.

Among the studies funded was the Cannabis Youth Treatment Study, a large field experiment that evaluated five different adolescent treatment approaches. The purpose of experiment was:
"to test the relative effectiveness and cost-effectiveness of a variety of interventions designed to eliminate marijuana use and associated problems in adolescents and to provide validated models of these interventions to the treatment field. The target population was adolescents with cannabis use disorders of abuse or dependence, as defined by the American Psychiatric Association (1994), who were assessed as appropriate for treatment in outpatient settings".[7]

The researchers selected well-known, effective therapies that were used with adults and adapted those therapies for use with teens using marijuana. The study was the largest study for teens conducted to date and used only experts in adolescent treatment. More than 600 teens and their families were treated, and preliminary findings showed that each therapy worked. In fact, the results were so encouraging that the research protocol manuals were adapted for use by substance abuse treatment providers nationwide. This marked the beginning of using manual-guided therapy in substance abuse treatment. These treatment models are also significant as they established factually that adolescent substance abusers have their own characteristics and therapies need to be appropriate for adolescents and not just copy adult treatment theory.[7]

The major therapeutic models tested through this research included: (1) Motivational Enhancement Therapy (MET) offered in a five session and a seven session model; (2) Family Support Network for Adolescent Cannabis Users; (3) Adolescent Community Reinforcement

Approach for Adolescent Cannabis Users, Volume 4; and Multidimensional Family Therapy for Adolescent Cannabis Users, Volume 5.[2]
Among research-based methods selected by programs participating in the ISR evaluation is Motivational Enhancement Therapy and Cognitive Behavioral Therapy for Adolescent Cannabis Users (MET/CBT5) applied in five sessions. This therapeutic approach was designed for adolescents between the ages of 12 and 18 who meet any of the criteria for cannabis abuse or dependence; who experience emotional, physical, legal, social, and/or academic problems associated with marijuana use, and/or who use marijuana at least weekly for 3 months.

The combination of the use of both motivational enhancement therapy and cognitive behavioral therapy (MET/CBT) nets several benefits:

- Provides the shortest therapy (5 sessions)
- Includes both individual and group sessions for teens
- Appeals to managed care and families with limited resources
- Provides ways to help motivate clients to change
- Provides training tips for gaining valuable skills, such as how to refuse marijuana, how to increase the clients' social support network and non-drug activities, and how to avoid or cope with relapses.

Literature Review on MDFT
The rationale for pursuing family therapy as a substance abuse treatment model initially developed in the early 1990's. Over time initial research built on the concept of risk and protective factor theories (Hawkins, Catalano & Miller 1992) has expanded to focus on the multiple risk and protective factors for adolescent substance use and misuse that operate in the family. As a result, clinicians have come to understand the important role that parents or caregivers play in treatment engagement and outcome (Kazdin, Siegel & Bass 1990). Family-based treatment is the most thoroughly studied treatment modality for adolescent substance misuse (Crits-Cristoph & Siqueland 1996). Among the more notable examples are: Multi-systemic Therapy (MST) (Henggeler 1999), Brief Strategic Family Therapy (BSFT) (Szapocznik *et al*. 1986), an integrative cognitive behavior therapy and family therapy model (Waldron *et al* . 2001), a family empowerment intervention (Dembo *et al* .1998) and Multidimensional Family Therapy (Liddle 2002a). These programs have been developed, tested and yielded promising findings.[8]

Multi-Dimensional Family Therapy (MDFT) was certified as a SAMHSA Model Program in January of 2005. Originated through research conducted by Howard Liddle at the University of Miami, Center for Treatment Research on Adolescent Substance Abuse, this approach to engaging families in adolescent substance abuse treatment services has proven to be very effective. [3.] It also provides for flexibility in its administration as it does not subscribe to the "one size fits all" model of implementation. [3]

Another important aspect of the MDFT findings pertains to the durability of the changes that occur in clients. Previous research had demonstrated that between 50% and 71% of all teens relapse to consistent marijuana and alcohol abuse within 90 days after ending treatment. Findings in the MDFT study demonstrated stability in the changes brought about by the MDFT treatment which was significant. In addition, Bry and Krinsley among others have written about the possibility of including booster, post-treatment interventions to shore up the obtained changes in adolescent family-based treatment. The MDFT study design did not include booster sessions or contacts of any kind for any of the three tested treatments. The measured changes in the MDFT cases--the positive outcomes in important symptom and pro-social domains--were of a treatment that was delivered consistently and coherently in one package, within a 5-6-month, outpatient therapy regimen.[8]

Basic understanding of adolescent marijuana use is focused on addressing common problems in working with adolescents and their families. These include multiple, interacting risk factors for adolescent marijuana use including family conflict, poor communication; poor or lack of parent skills; negative peer relationships; poor school performance and disconnection; behavior problems; and, emotional reactivity. Research findings from the MDFT and other studies show that family factors are a strong predictor of adolescent marijuana use and cannabis use is often predicted by early childhood risk. [8]

The basic approach to utilization of MDFT is to facilitate development targeting multiple dimensions in an adolescent's life. Youth at greatest risk for marijuana use/abuse are those with multiple problems early in life, particularly family dysfunction. MDFT has been found to influence marijuana use as well as delinquency, school problems and mental health systems. The program works with the adolescent, parents, family and peers which are the primary influences for the adolescent. The program attempts to restore adolescents' connections to school, work, family and pro-social outlets, and to improve parent functioning to reduce stress in families. Compared with other therapies and with residential treatment, MDFT is considered highly cost effective. [8]

Meta analyses and comprehensive reviews of research determined certain empirically tested family-based therapy models appear to yield the best outcome results in terms of substance use reduction at termination and follow-up. However, new treatment must be both practical and useful in real community based settings and must both reduce dysfunction and increase positive behavior and adaptive functioning. Ideally, this combination of benefits is able to be maintained and/or enhanced after treatment ends.

"In the current study, the MDFT approach achieved superior overall outcomes relative to the comparison treatments since it not only created significant adolescent drug reductions, but also had an impact on other critical domains of individual and family system functioning. Given what we know about the important protective and adaptive developmental functions served by positive family relations and a teenager's success in school, the changes achieved by MDFT in these domains must be considered significant." [8]

Literature Review for Brief Strategic Family Therapy

A second therapeutic approach being used by one of the substance abuse programs in the ISR study is Brief Strategic Family Therapy (BSFT). The use of Brief Strategic Family Therapy (BSFT) as an intervention for delinquent youth originated from the work of the Spanish Family Guidance Center (Center) in Miami, Florida in the mid to late 1970's. To provide services to the largely Cuban community in Miami, it was necessary for the Center to identify and develop "a culturally appropriate and acceptable treatment intervention for Cuban youth with behavior problems." [9] BSFT is meant to be used with adolescents between 8 and 17 who display or are at risk for developing behavioral problems including substance abuse The basic goal in applying BSFT is to "improve family relationships that are presumed to be directly related to youth behavior problems, and to improve relationships between the family and other important systems that influence the youth (e.g., school, peers)." [9]

The research is built on the concept that each family has its own unique "system" of functioning and its own "structure" which refers to the repetitive pattern of interactions that characterize a family system. BSFT is intended to target the interaction patterns (i.e., the habitual ways in which family members behave with one another) that are directly related to the youth's behavior problems.[9]

The strategy used in applying BSFT is one that incorporates interventions that are practical, interventions that are problem focused, and interventions that are well planned, meaning that the therapist determines what seem to be the family interactions that are directly related to the youth's behavior problems, determines which of these might be targeted, and establishes a plan to help the family develop more effective patterns of interaction.

Issues that need to be confronted in providing BSFT include:

Engagement - getting families to participate in treatment and see the family therapy through to a positive conclusion is extremely difficult. Substance abuse treatment programs working with adolescents and families have traditionally had a very difficult time in engaging families in treatment. BSFT utilizes a concept called Strategic Structural Systems Engagement to address the problem of engaging families in therapy.

Diagnosis - refers to assessing the interaction patterns (structure) that allow or encourage problematic youth behavior. To derive complex diagnoses of the family, therapists need to carefully examine family interactions along five interactional dimensions including: structure, resonance, developmental stage, identified patient, and conflict resolution as identified and discussed in the training manual for this therapy.

Restructuring - as the therapist identifies family communication and interaction patterns that contribute to problem behaviors, it is his/her job to restructure that communication and interaction to change the interactions to become "more effective and adaptive interactions that eliminate the problems". [9]

Refinements to the BSFT model have also been developed to enable the conduct of "one-person family therapy" where family members cannot be engaged in treatment. Therapy with one family member is applied to change family interactions and/or engage families in treatment. [9]

The proper administration of family therapy using the BSFT method is complex and good training for therapists that plan to use this tool is an essential element in providing quality services. Results of comparisons of BSFT with other treatment approaches has shown family focused therapies in research settings to be highly effective. Still, questions are raised as to how best to apply evidence based practices in community treatment settings, particularly how to maintain fealty to treatment models and sustain positive changes after therapy concludes.[12]

REFERENCES

1. "Does Treatment Work?" Frontline. as found at http://www.pbs.org/wgbh/pages/frontline/shows/drugs/buyers/doitwork.html

2. The General Accounting Office Report. "Drug Abuse: Studies Show Treatment is Effective But Benefits May Be Overstated". General Accounting Office, 1998.

3. Martin, Kimberly R., Contributing Writer. "Adolescent Treatment Programs Reduce Drug Abuse, Produce Other Improvements. NIDA Notes. Volume 17, Number 1 (April 2002).

4. "Executive Summary: Bridging the gap between practice and research forging partnerships with community-based drug and alcohol treatment." The National Academies Press. 500 Fifth Avenue St., N.W. Washington, DC. 1998.

5 "Initiative Blends Research and Practice". SAMHSA News. September/October 2006. Vol. 14, 5.

6. "Table C2**.** *Marijuana Use in Past Month, Average Annual Rate of First Use of Marijuana, and Perceptions of Great Risk of Smoking Marijuana Once a Month* among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs. New Mexico". Office of Applied Studies. Substance Abuse and Mental Health Services Administration.

7. "Cannabis Youth Treatment Series." Center for Substance Abuse Treatment. Substance Abuse and Mental Health Services Administration. US Department of Health and Human Services @www.samhsa.gov.

8. Liddle, H.A.; Dakof, G. A.; Parker, K. Diamond: G. S. Barrett, K.; Tejeda, M. Multidimensional family therapy for adolescent drug abuse: results of a randomized clinical trial. American Journal of Drug and Alcohol Abuse. November, 2001.

9. Robbins, M. & Szapocznik, J. "Brief Strategic Family Therapy". *Juvenile Justice Bulletin*. April, 2000.

10. Sampl, S. and Kadden, R. "Motivational Enhancement Therapy and Cognitive Behavioral Therapy for Adolescent Cannabis Users: 5 Sessions." Volume 1. Center for Substance Abuse Treatment. Substance Abuse and Mental Health Services Administration. US Department of Health and Human Services. 2000.

11. Szapocznik, J., Ph.D., Hervis, O. M.S.W., L.C. Olga Hervis, M.S.W., L.C.S.W., Schwartz, S. Ph.D. "Brief Strategic Family Therapy for Adolescent Drug Abuse". National Institute on Drug Abuse. US Department of Health and Human Services

12. Sanatisteban, D., Ph.D., Suarez-Morales, L, Ph.D., Robbins M.. Ph.D. and Szapocznik, J. Ph.D., "Brief Strategic Family Therapy: Lessons Learned in Efficacy Research and Challenges to Blending Research and Practice." Pub Med Central Journal List. July 5, 2006 as found at http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1488196

LITERATURE REVIEW
SUBSTANCE ABUSE ADOLESCENT TREATMENT AND EARLY INTERVENTION
EVALUATION OF CLIENT OUTCOMES

Introduction

As a part of the substance abuse program evaluation being conducted by the Institute for Social Research (ISR) for the Albuquerque Division of Behavioral Health (DBH), this literature review documents the development and implementation of methods and approaches being utilized to evaluate program and client performance in adolescent treatment services and in early intervention programming funded by the City. In addition to the use of evidence-based models in treatment and/or early intervention service delivery, programs funded by the City must demonstrate that they are evaluating program and client outcomes to show effectiveness of the services being provided.

Service programs participating in this evaluation project include adolescent day treatment services conducted by the Hogares Mariposa Day Treatment Program and early intervention services for high risk youth and families conducted by Youth Development, Incorporated (YDI). These programs seek to measure changes in adolescent and family characteristics and behavior as a result of participation in their respective programs. The Children's Functional Assessment Rating Scale or CFARS is planned for use in evaluating client outcomes by Youth Development, Incorporated (YDI) and Hogares Mariposa Day Treatment Program. YDI is also using the North Carolina Family Assessment Scale or NCFAS to assess family functioning.

CHILDREN'S FUNCTIONAL ASSESSMENT SCALE (CFARS)

Background

In 1993, the District 7 Office of the Florida, Alcohol, Drug Abuse and Mental Health Program Office in Orlando, Florida was seeking an effective method of determining if locally funded substance abuse programs were being effective with their clients --were these programs making a positive difference? Accordingly, the District Office sought help in establishing a method to evaluate funded programs from the Florida Mental Health Institute (FMHI) located at the University of South Florida in Tampa, Florida.[1] FMHI has emerged as a national leader in behavioral health research. The Institute houses several state and national research and training centers focused on improving practices in treating mental, addictive, and developmental disorders.

Introduction

The Children's Functional Assessment Rating Scale (CFARS) was developed by John C. Ward, Jr., Ph.D. Dr. Ward is an Associate Professor in the Department of Mental Health Law & Policy at the Florida Mental Health Institute. Today the FARS and CFARS are used statewide by mental health authorities and mental health service providers in Florida, Wyoming, New Mexico, Illinois, in the country of Malta, and elsewhere to evaluate effectiveness of publicly supported behavioral healthcare services.[2]

The first evaluation tool developed was the Functional Assessment Rating Scale (FARS) used with adults receiving alcohol and drug abuse services and later also used to assess the effectiveness of services for children. The FARS was adapted from the Colorado Client Assessment Record (CCAR), which had an extensive history of use in evaluating behavioral health services. In working with children's programs, Dr. Ward and his colleagues determined that changes were needed to ensure an accurate reflection of the specific children's issues believed to be important by children's behavioral therapists. Subsequently, changes were made to the instrument which has developed into the CFARS used today in Florida, Wyoming, New Mexico and Illinois, primarily to evaluate outcomes for general revenue or Medicaid funded behavioral health services.

Training is needed by clinicians and/or supervisors in the use of the CFARS instrument and is provided free on the FMHI website. Manuals and other training materials are also free. The CFARS Web-Based Training and Certification process is self-paced but can generally be completed within two to three hours for each instrument. The primary learning objective of the online training is to ensure that persons providing clinical services will be able to use the CFARS Problem Severity Rating Scale as demonstrated by their ability to take at least two and pass at least one training vignette, and to successfully pass a competency-based certification test by correctly rating 12 out of 16 domains on the CFARS certification test. This will enable clinicians to demonstrate the following:

1. An overall understanding of the purpose of each of the domains.
2. Ability to use presenting behaviors and symptoms to determine functional domain ratings.
3. Ability to identify functional areas to be addressed in the treatment/service planning process post CFARS rating.

Reliability of the CFARS Instrument

In New Mexico, the CFARS Instrument was used by the state to assess the impact of Student Based Health Centers. The New Mexico Interdepartmental School Behavioral Health Partnership is a joint effort involving the Department of Health, Department of Education, the Children, Youth, and Families Department, and Human Services Department (CYFD). The Partnership pools resources to support exemplary practices in School-Based Health Services to increase student access to school-based mental health and substance abuse early intervention and treatment services. Through a competitive process four sites were selected as Exemplary School Based Health Centers - in Albuquerque, the University of New Mexico received $61,250 to provide services at Laguna-Acoma Middle/Senior High School, the ACL Teen Center, and To'Hajiilee Community School, grades 6-12.[10]

CFARS was selected as one of the instruments to assess the services of the School Based Health Centers. CFARS was implemented across all four sites in the fall of 2002 and was administered to students on intake and every 90 days. CFARS was characterized by reviewers as a "user-friendly tool that provides a snap shot of client functioning that is sensitive to change. It is a research-based tool with demonstrated acceptable levels of validity and inter-rater reliability." [3]

As of 2004, the CFARS is mandatory for agencies/contractors providing behavioral health services to one or more of the target populations defined in the Children's Behavioral Health Service Definition Manual by New Mexico Family Services, Children's Behavioral Health and

Community Services Bureau published in 2004 this manual. The CFARS is required for all identified clients (child/youth ages 5 through 18), and must be scored at intake, every (3) three months thereafter, and at discharge. The CFARS is defined as an integrated tool for standardizing results obtained from psychosocial or other clinical assessments. It is one of the instruments used to measure performance outcomes with the goal of improving individual CFARS indexes in Relationship, Emotionality, and Safety.

In Wyoming, the CFARS Instrument is being used to establish client outcomes in community mental health services. The instrument was found reliable and is now in use through web-based performance reporting.[4]

In Illinois, CFARS is one of several assessment instruments found valid by the Department of Children and Families and was used to evaluate program outcomes for children in residential care. [6]

Validity of the CFARS Instrument

One way of assessing the validity of the CFARS domains is to compare and contrast the admission ratings at different levels of care. If the problem severity rating scales are measuring what they are designed to measure (and are thus "valid"), you would expect to find higher mean problem severity ratings associated with more restrictive levels of care, since children with more severe problems should be admitted into more restrictive levels of care. Problem severity ratings were analyzed for admission into 8 different levels of care. As discussed in the CFARS Manual, "The results of this analysis contribute evidence of the validity of the CFARS problem severity rating domains, since the more restrictive levels of care (e.g., Residential Level I, Residential Case management, and Children's Crisis Stabilization) tend to have higher average problem severity ratings than less intensive services like day treatment, outpatient counseling or community case management. Importantly, not only do the average problem severity ratings tend to be higher for the more restrictive levels of care, the more "serious" problem areas related to Danger to Others and Danger to Self are rated more severe (higher) in the residential program, residential case management and the CCSU than for the other levels of care. The "Substance Use" scale also seems to be working in the expected direction when comparing ratings between substance abuse programs and mental health programs…and comparing inpatient substance abuse programs with outpatient substance abuse services. Additional studies of validity of the CFARS were completed and descriptions of the results of those studies were consistent with the above findings." [5]

Construct of the Evaluation Instrument

The intent of the CFARS was to have a single instrument that could: (1) gather functional assessment information for domains relevant for evaluating children; (2) gather data measurements that can be used to evaluate program outcomes; and, (3) provide information helpful to clinicians and agencies delivering services. This information was also intended for policy makers in carrying out planning and budgeting activities.

The CFARS is a "multi-domain" functional assessment considered a valid and reliable way to document effectiveness of functioning separately for Cognitive, Behavioral, Physical/Medical, Interpersonal, Social and Role domains. CFARS is designed to assess the level of severity at

which a child is experiencing difficulty or impairment in a variety of domains that assess cognitive or behavioral (social or role) functioning. The need for or admission into behavioral healthcare services usually indicate impaired functioning in one or more domains. *Discharge from treatment (or early intervention services) usually follows restoration or improvement in functioning in those domains.* [5]

Clinicians assign a Problem Severity Rating based on 16 behavioral domains seen in **Exhibit I:**

EXHIBIT I
CFARS BEHAVIORAL DOMAINS

Survey Items	**Factor Scales**
Depression	E
Anxiety	E
Hyperactivity	R
Thought Process	D
Cognitive Performance	R
Medical/Physical	D
Traumatic Stress	E
Substance Use	PS
Behavior in Home Setting	R
Interpersonal Relationships	R
Work or School	R
ADL Functioning	D
Socio-Legal	PS
Danger to Others	PS
Danger to Self	R
Security/Management Needs	PS

D=Disability; E=Emotionality; PS=Personal Safety; R=Relationships (Ward et al. 1999)

Multi-functional assessments are used at various clinical and management levels:

- At the *individua*l level, multi-functional assessments can be used by clinicians to develop treatment or intervention plans by identifying and documenting problem areas and potential assets of functioning at admission …and, to evaluate and monitor progress during treatment or intervention;

- At an *agency* level, this assessment tool can be used to help monitor overall quality assurance and improvement goals through aggregating ratings; and,

- At a *funding agency (City of Albuquerque)* level, multi-functional assessments help plan for needed services.

In general Severity Ratings are assigned as determined by:

1. **How immediate is the need for intervention**: (none, to sometime in the future, to immediate)

2. **How intrusive is the intervention that is needed**: (ranging from need for normal or slightly more than normal levels of interpersonal or social "support" to need to for supportive medications with few side effects, to the need for major medications with serious side effects, or external physical, structural or environmental controls.

3. **How does functioning in the rated domain impact functioning negatively in other domains**: if the depression domain is affecting family or school relationships it would be rated more seriously than if no other domains were impacted. [5]

The chart shown in **Exhibit 2** on the following page reflects how these questions relate to problem severity ratings. For purposes of the ISR Evaluation for the City of Albuquerque Division of Behavioral Health, important questions include:

1. Is the CFARS instrument being applied consistently to program participants?
2. Is there documented evidence of one or more program personnel who have completed training in the CFARS instrument?
3. How is CFARS data being used to deliver services and/or improve client outcomes?

NORTH CAROLINA FAMILY ASSESSMENT SCALE (NCFAS)

Background

The YDI program has elected to also use the North Carolina Family Assessment Scale or (NCFAS) as a part of the evaluation of their early intervention program. Over the past 20 years, integration of family assessments and family therapy into substance abuse treatment and intervention practices has gradually grown. Substance abuse within families has devastating consequences including child abuse; parental drug use; children exposed to drug sales and trafficking, and early exposure to drug use by young children. To address these consequences of drug involvement, models, approaches, and concepts in family therapy have been introduced into training for substance abuse counselors including an understanding of the wide variety of "family" constructs that are prevalent today.

The National Institute on Drug Abuse (NIDA) has conducted research on effective substance abuse prevention programs including early intervention models. Family dynamics play a key role in determining risk and protective factors for children. Common family risk factors for substance abuse include: a lack of attachment and nurturing by parents or caregivers; ineffective parenting; and a caregiver who abuses drugs. Commonly recognized protective factors affected by family dynamics include: a strong bond between children and parents; parental involvement in the child's life; and clear limits and consistent enforcement of discipline.[9]

As a part of the use of Multi-Dimensional Family Therapy model, as an evidence-based model, individual parent sessions, family sessions, and home visits are required. Based on research, best practice guidelines say that some family involvement is critical (Drug Strategies, CSAT Adolescent TIPS). Both JCAHO and managed care companies expect some family involvement in clinical services, and clinicians believe in the value of family therapy (Godley, et al. 2001).

Exhibit II

Basic Issues to consider when assigning CFARS Problem Severity Ratings to individual Functional Domains	**Children's Functional Assessment Rating Scale Problem Severity Ratings**								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
	No Problem		**Slight Problem**		**Moderate Problem**		**Severe Problem**		**Extreme Problem**
How much work does functioning in the domain being rated currently **impact negatively or interfere with healthy functioning in other Cognitive, Behavioral or Social domains**?	The domain being rated does not impact negatively on other domains. Functioning in this domain may be an "asset" to the individual and may be serving to prevent functional decline in other domains.		Functioning in the domain being rated currently has little or no negative impact on other domains even if current reduced impact on other domains is due to "moderate" or less intervention		Problems in the domain being rated may be related to or is contributing slightly to problems in other domains ….even if reduce impact on other domains is due to "severe" intervention		Functioning in rated domain almost always contributes to problems in more than one other domain….even if reduced impact on other domains is due to "extreme" intervention		Functioning in rated domain negatively impacts most other domains by precluding ability for making autonomous decisions about treatment
How **intrusive** is the intervention that will be needed to stabilize or correct deficits in functioning within the domain being rated?	Intervention is not required…no deficits in functioning in this domain… Functioning in this domain may be an asset in structuring intervention(s) to improve other domains.		No intervention "required" at this time …or, functioning in the domain is "controlled by previously implemented "moderate" or less intrusive intervention(s)		Moderately intrusive intervention may be needed: e.g. counseling, Cog/Behavioral or Talk therapy, referral to voluntary services, self help groups, "some" meds, etc., or current voluntary sue of a more "severe" intervention.		Voluntary hospitalization, voluntary participation in external intrusive behavioral controls, voluntary use of medications requiring "lab" monitoring		Involuntary hospitalization or other involuntary intrusive external control, or involuntary use of medications needed in addition to other therapeutic interventions to "ensure" safety
How **immediate** is the need for intervention in order to stabilize or correct deficits in functioning within the domain being rated?	Functioning in this domain is average or better than average for this individual's age, sex & subculture and there is no need for intervention in this domain.		Need for intervention in this domain is not urgent but may be required sometime in the future if not self corrected….or domain functioning controlled by self monitored "moderate" or less Intrusive intervention(s)		"Moderate intervention is "required" …or externally monitored previous moderately intrusive external intervention must be continued to maintain improved functioning in domain being rated.		"Immediate" need for external intervention to improve functioning in domain being rated or improved functioning is being maintained by "severe" intervention		"Immediate/ Imperative"; Functioning in this domain creating situation totally out of control, unacceptable and/or potentially life-threatening

A literature review of family assessment instruments was conducted in June of 2006 by the University of California at Berkeley. According to the review, "comprehensive family assessment has been defined as the process of identifying, gathering and weighing information to understand the significant factors affecting a child's safety, permanency, and wellbeing, parental protective capacities, and the family's ability to assure the safety of their children." The U.S. Department of Health and Human Services recently released guidelines for comprehensive family assessment to provide an initial framework to facilitate the development of best practices. Family assessment instruments are often used in making decisions about child placement, family reunification, termination of parents' rights and case closure in the child welfare field.[8]

Construct of the NCFAS

The NCFAS (Reed-Ashcraft, Kirk, & Fraser, 2001) was developed in the mid-1990s to allow caseworkers working in intensive family preservation services (IFPS) to assess family functioning at the time of intake and again at case closure. The instrument was designed to assist caseworkers in case planning, monitoring of progress, and measuring outcomes.

THE NCFAS assesses family functioning across a six point scale examining a set of five domains in which to rate child and family problems and their resolutions. Thirty nine items cover: the domain of Environment that measure basic needs such as safety, housing, food, etc.; the domain of Parental Capabilities which measure issues such as supervision, discipline, parental substance abuse; Family Interactions which measures items such as bonding with children, family support, and relationship between parents/caregivers, etc.; the category of Family Safety which measures issues related to physical or sexual abuse, etc.: and, Child Well Being which measures issues such as children's mental health, school performance and peer relationships. [8]

Ratings are measured upon admission to a program (intake) and again within one to two weeks of case closure or program discharge. Each item is scored as follows:

+2 = Clear Strength,
+1 = Mild Strength,
0 =Baseline/Adequate,
-1 = Mild Problem,
-2 = Moderate Problem, and
-3 = Serious Problem.

The scale in intended to be an intra-rater scale, meaning that the same worker does the initial rating should also do subsequent rating on the same family. It is designed to be completed in the home environment. The NCFAS is a staff rating scale rather than a self report scale. It is recommended that the administrator have a Master's Degree and be very familiar with the family upon which the instrument will be used. The assessment takes about 30 minutes or less. [8]

Reliability and Validity of the NCFAS

Internal consistency and construct validity have been established for early versions as well as the most recent version of the NCFAS (Version 2.0; Reed-Ashcraft et al., 2001, Kirk et al., in press) and the instrument is able to detect changes in functioning over time. The instrument also

appears to have some predictive ability, but authors caution that more research is needed to verify this feature. [8]

As with other assessment instruments used in best practice programs, the relevant questions for the ISR evaluation include:

1. Is the NCFAS instrument being applied consistently to program participants?
2. Is there documented evidence of one or more program personnel who have completed training in the NCFAS instrument?
3. How is data from the NCFAS being used to deliver services and/or improve client outcomes?

LITERATURE CITATIONS

1. "A Chronology of the Institute". The Louis de le Parte Florida Mental Health Institute. University of South Florida. 2002.

2. Ward, John C., Ph.D. "FARS, CFARS, and MGAF-R: What do you want to know about them? How can they help you do your work?" 2005 FCCMH/LAPRA Conference. "Mission Possible: Inspiring Hope and Recovery." September 14, 2005.

3. Exemplary School Based Health Centers. Annual Report, September, 2002. New Mexico Department of Health, Behavioral Health Services Division; Prepared by High Desert Education. 2003.

4. Using Web-Based Technology to Monitor Functional Assessment. Wyoming Department of Mental Health. 2002.

5. Ward, et al. Children's Functional Assessment Rating Scale. Department of Mental Health Law and Policy. Florida Mental Health Institute. University of South Florida. Tampa, Florida . Revised, May, 2006.

6. Leon, Scott, Ph.D. et al. "Matching Needs and Resources for Residential Care." Loyola `University, Chicago; Illinois Department of Children and Family Services; and, University of Illinois, Chicago, Department of Psychiatry. 2003.

7. "North Carolina Family Assessment Scale for Intensive Family Preservation Services. Version 2.0." as found at http://sswnt7.sowo.unc.edu/jif/reports/Ncfas_20.pdf.

8. Johnson, Michelle A., et al. "Family Assessment in Child Welfare Services: Instrument Comparisons." Bay Area Social Services Consortium and the Zellerbach Family Foundation. September, 2006.

9. "Preventing Drug Use Among Children and Adolescents". National Institute on Drug Abuse. February, 2005 as found at http://www.drugabuse.gov/prevention/risk.html.

10. Exemplary School Based Health Centers. Annual Report September, 2002.Prepared for New Mexico Department of Health, Behavioral Health Services Division. High Desert Education. 2002.