THE CREST REPORTER

Youth Policy Institute Evaluation of the Cayuga Rural Elementary School-based Treatment Initiative

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CREST Services from September 2009 to February 2012

INTRODUCTION

The central goals of the ***Cayuga Rural Elementary School-based Treatment (CREST) Initiative*** are to improve access of young students to evidence-based counseling services. In 2009, Port Byron Central School District received a 3-year grant from the U.S. Department of Education, Elementary and Secondary School Counseling Program to implement CREST. The funded project is being implemented in collaboration with the Partnership for Results, an interagency entity in Central New York that specializes in administering, monitoring, and sustaining evidence-based programs for children and youth. CREST services are being provided in all 6 elementary schools of Port Byron, Cato-Meridian, Jordan-Elbridge, and Union Springs Central School Districts, a target population of over 2,000 students.

THE PROGRAM

Multi-disciplinary assessment and school-based counseling services are the centerpieces of the CREST Initiative. The four CREST clinicians assigned to the participating schools are trained in providing services using the Mobile Outreach Services Team (MOST) model. MOST is a research-based program for delivering mental health and other support services. Developed by the Partnership for Results from 1999 to 2001 in collaboration with local and national experts, MOST has several components that are essential for achieving positive results:

- Systematic screening of school-age students by teachers for mental health and other risk factors using the Observation Checklist;
- Multi-disciplinary, comprehensive assessment by clinicians using the Well-Being Assessment Instrument (known as the "WellBAT");
- Service delivery monitored with the Partnership's interagency database (CHARI – Children At-Risk Interagency database);
- Development of integrated service plans for clients and their families; and
- Provision of evidence-based therapeutic interventions – either Child-Centered Play Therapy (CCPT) or Cognitive Behavioral Therapy (CBT) – depending on the maturity, cognitive abilities, and clinical needs of the client.

Under the MOST model, each clinician maintains a caseload of approximately 23-25 students (depending somewhat on the intensity of the needs of the clients) and provides among other services, a maximum of 21 counseling sessions.

THE LOCAL EVALUATOR – YOUTH POLICY INSTITUTE

The evaluation of CREST services is being conducted by Youth Policy Institute, Inc. (YPI), a not-for-profit research and evaluation agency located in central New York. YPI is employing a comprehensive evaluation model, examining, among other issues, the programmatic context, fidelity of implementation to the essential components of the model, involvement and response of families, and outcomes of the program.

The *CREST Reporter* appears periodically during the course of the project to provide project staff and community members with insights on the project's implementation, administration, effectiveness, and outcomes.

This edition of the *CREST Reporter* is an update of the previous evaluation studies. In it, YPI reviews the extent to which the program reached its intended target population and analyzes outcomes for project's 2.5 years of service delivery, from September 2009 to February 2012.

Data Sources. This evaluation update relies on three principal data sources:

- ***Children At-Risk Interagency database (CHARI).*** Client-based information, including demographic, assessment, and treatment data, was accessed from the CHARI database in a manner that ensured client confidentiality.
- ***Parent surveys.*** Clinicians distribute anonymous parent/caregiver surveys at the end of interventions to collect information on family involvement in and satisfaction with MOST services, and to gather a critical perspective on the effects of the intervention. YPI and Partnership supervisors are careful to ensure that respondents understand that survey completion is voluntary and confidential. Of the 193 cases closed and completed since the program's inception, 155 parents and caregivers completed surveys for a very high return rate of 80%.
- ***Site visits, staff surveys, interviews, and focus groups.*** YPI staff annually conducts site visits and interviews building administrators to assess the degree to which CREST services have become an accepted part of the participating school communities. These activities provide critical information on whether the referral and counseling process is, from the perspective of school staff and administrators, proceeding as intended. YPI also conducts focus groups annually with the clinical staff, and, on a more frequent basis, interviews the CREST clinical director.

I. THE TARGET POPULATION

Cases opened. From September 2009 to February 2012, 294 students became MOST clients. During the last 2 years, the *intake rate slowed considerably.* During the 12 months ending in February 2012, 78 cases were opened, compared to109 cases opened in the preceding 12 months.

Closed and Completed Cases. Since the program began taking clients, two-thirds of opened cases were closed and completed – meaning that the students and their families had completed the entire intervention as planned. This is *an exceptionally high completion rate* for a robust and extensive intervention that includes:

- ✓ Two comprehensive assessments, at the beginning and the end of the intervention;
- ✓ 21 sessions of school-based counseling services, typically over a period of 6-7 months;
- ✓ The development of integrated service plans and access to ancillary programs and services;
- ✓ The development and implementation of discharge plans.

A factor analysis of closed and completed CREST cases indicates that over the course of the project *the rate at which cases were closed did not vary significantly by school, special needs, gender, age, ethnicity, or household income.* In other words, the program was sufficiently robust and well implemented that services were provided as intended for a great majority of clients across all sites, regardless of demographic factors, and notwithstanding the clinician.

Key Characteristics of MOST Participants. An analysis of the family and client characteristics of CREST participants since the beginning of the initiative indicates that the project is *serving clients who typically have limited access to counseling services* (**Table I.1)**.

Table I.1: Family Characteristics of CREST Clients (N=294)

	Sept 09-Feb 12
Number of Times the Household has Moved in the Past 5 Years	
0 (did not move)	39%
1 time	32%
2 or more times	30%
Annual Household Income	
< $20,000	36%
$20,000- $34,999	29%
$35,000-$50,000	29%
$50,001+	6%
Family Structure	
Both biological parents	46%
Mother only	35%
Father only	6%
Neither biological parent	13%

Family Characteristics

Residential Mobility. Over the course of the CREST initiative, *3 in 10 families participating in MOST changed residences at least 2 times over a 5-year period* (**Table I.1**). For many young children, such mobility disrupts their academic development.

Over the course of the project, the residential mobility of CREST families increased. During the first 12 months of service delivery, 58% of families moved at least once in the past 5 years; during the last 12 months of CREST services, this increased to 64% families.

Family Income. From September 2009 to February 2012, more than one-third of the participating families had household incomes of less than $20,000 per year, compared to less than 14% of rural households in Cayuga and Onondaga Counties. The income distribution of CREST families (**Table I.1**) was stable over time.

Throughout the project, then, *MOST CREST primarily served students in low-income families who would otherwise have difficulty accessing these assessment and mental health service.* In the area targeted by CREST: mental health and other support services are urbanized; many families lack the time and/or functioning automobiles to bring their children to Auburn and Syracuse; there is a paucity of public transportation; many households lack the means to pay for services; and many families are without third party coverage.

Family Structure. Over the course of the project, slightly less than one-half of CREST clients lived with both biological parents (**Table I.1**). Of the opened cases, 35% lived in mother-only families, compared to 24% among rural households nationally, and 6% were in father-only families (approximately the national rate).[1] Living in single head of household families presents a significant number of challenges to children and youth, and is linked to, among other factors, chronic poverty and lower levels of academic achievement.[2]

[1] C.C. Rogers (March 2005) Rural Children at a Glance. *US Department of Agriculture Economic Research Service, Economic Information Bulletin Number 1*. http://www.ers.usda.gov/publications/EIB1/eib1.pdf

[2] K.A. Moore (April 2009) Children in Poverty: Trends, Consequences, and Policy Options. *Child Trends Research Brief.* http://www.childtrends.org/Files//Child_Trends-2009_04_07_RB_ChildreninPoverty.pdf.

- *It is noteworthy that the distribution of CREST family structures changed significantly over time,* with a noteworthy shift toward children living in single-mother households (from 37% in the first 12 months of the project to 49% in the last 12 months) and a decline in children living in households with both biological parents (from 42% to 35% of CREST clients).

Table I.2: Characteristics of MOST Clients (N=294)

	Sept 09-Feb 12
Gender	
Female	40%
Male	60%
Race/Ethnicity	
White	91%
Mixed Race or "Other"	5%
African-American	2%
Hispanic or Latino	2%
Age of MOST Client When the Case Opens	
5	9%
6	20%
7	14%
8	13%
9	18%
10	14%
11	9%
12+	4%
Special Education Status	
No IEP	88%
IEP	12%

Client Characteristics

Client Gender. Over the course of the project, two-fifths of CREST clients were female, and three-fifths male (**Table I.2**). As reported in the prior editions of the *CREST Reporter,* project clinicians have worked with school instructional and support staff to address the sources of the gender imbalance in the CREST client population. *These efforts have been quite successful: in the first year of the project, 63% of CREST clients were male, while during the past 12 months, 58% were male.*

Client Race/Ethnicity. A review of archival data regarding the race/ethnicity of students attending the participating schools indicates that students of color were proportionately represented in the CREST caseload (**Table I.2**). There was no change over time in the distribution of CREST clients by race/ethnicity.

Client Age at Case Opening. Over the course of the project, 6- and 9- year-old students were disproportionately represented in the caseload **(Table I.2**). Nonetheless, it is evident that the CREST team served significant number of students in all grades through 6th grade.

Clients with Special Needs. Of the 294 MOST CREST cases opened, 11% of clients (33 students) had Individualized Education Plans (IEPs), none of which included classification for emotional disturbance.

- CREST clients were as likely to be classified as having special needs as the general population of students.
- *There was a marked variation in the inclination of school districts to refer students with disabilities to MOST CREST*. Only 3% of Cato-Meridian's student clients had an IEP, compared to 16% of Jordan-Elbridge's clients, 12% of Port Byron's CREST clients, and 17% of Union Springs' clients. While these differences are reported, they are not statistically significant, given the small numbers of CREST participants with IEPs in each of the participating districts.

Clients by District

Clients Served by District. During the both years of the initiative, there was a roughly equal distribution of cases across districts (**Table I.3**).

Table I.3: Distribution of CREST Cases Opened During the First Two Years of Service Delivery

Cato-Meridian	*Jordan-Elbridge*	*Port Byron*	*Union Springs*
22%	26%	25%	27%

CREST Clients: Complex Service Needs

Well-Being Assessments. At the outset of each case, CREST clinicians administered the Well-Being Assessments (WellBATs), a multi-disciplinary service planning and assessment instrument with 37 sub-scales. This assisted clinicians to determine the extent to which student clients and their households would benefit from the CREST services: multi-disciplinary assessment; Child-Centered Play Therapy (CCPT) or Cognitive Behavioral Therapy (CBT) counseling; the involvement of the household in the development an integrated service plan; and comprehensive management of the case by the clinicians.

Initial administrations of the WellBAT at the case opening indicate that CREST clients faced a wide range of risk factors and problems that needed to be addressed with counseling and other services. *CREST, in other words, served the target population identified in the program narrative.* Through February 2012, CREST clinicians completed 275 initial WellBATs. The assessment scores indicate that program participants had, on average, moderate to severe problems on 11.3 subscales, and severe issues on 4.1 subscales.

- Over time, it is clear that the service needs of clients intensified noticeably. In the first year of service delivery, participants had, on average, severe issues on 4.0 subscales; during the last year of the project, that rose to 4.5 subscales.

"Serious" WellBAT issues. The WellBAT subscales for which MOST clients were most frequently assessed as having severe (or particularly intense) problems or situations are listed in **Table I.4**. The rank ordering of this list was stable during the 2.5 years of CREST activities. It is evident that the students' primary problems regarding their levels of function – severe externalizing and internalizing disorders – are co-occurring with (and quite probably are the result of) acutely stressful events and significant family dysfunctions, including family histories of mental illness, substance abuse, and/or criminal activity.

Table I.4: "Serious" WellBAT Ratings Affecting at least 20% of CREST Clients (N=275)

		% of Clients
1.	*Stressful events* – client experienced a stressful event within the year such as parent divorce or death of a loved one	45%
2.	*Family history of mental illness* – client's parents or siblings have a history of mental health problems	35%
3.	*Externalizing behaviors* – client exhibits significant issues regulating anger and aggressiveness	29%
4.	*Family history of substance abuse* – client's parents or siblings have a history of drug use	28%
5.	*Family history of criminal activity* – client's parents or siblings have a history of criminal activity	26%
6.	*Internalizing behaviors* – client exhibits anxiety, mood, and depression disorders	24%

"Moderate" or "Serious" WellBAT Issues. In addition to severe (or intense) problems and dysfunctions, WellBAT also gauges moderate (or emerging) issues. The most common problems affecting the level of functioning of young students that were emerging or intense were *excessive reactivity* and *poor problem-solving and social skills* (**Table I.5** below). The etiology of this range of behaviors are, as with severe problems alone, rooted in the experience of stressful events and family dysfunctions, particularly in the areas of adult interpersonal relations and inconsistent (or non-existent) family management techniques and skills.

Table I.5: "Moderate" *or* "Serious" WellBAT Ratings Affecting at Least 40% of CREST Clients (N=275)

	% of Clients
1. *Stressful events* – client experienced a stressful event such as parent divorce or death of a loved one either a) in previous years and has difficulty adapting to change (moderate) or b) within the last year (serious).	64%
2. *Temperament problems* – client exhibits signs of moderate to high reactivity and poor adaptability.	62%
3. *Parental/caregiver discord* – the presence of either moderate discord (minor communications difficulties between parents/caregivers but the difference does not impair their relationship) or severe discord (parents/caregivers are unable to communicate well and tend to have strongly differing views of how family activities and child discipline should be conducted).	55%
4. *Problem solving self-efficacy* – client feels he/she might be successful in solving problems but is unsure of his/her ability (moderate); client feels unable to handle problems and finds them overwhelming or out of his/her control (serious).	53%
5. *Social competence* – client is timid about social interactions and tends to avoid situations that require the use of social skills (moderate); client is unable to read social settings and determine the appropriate responses (serious)	50%
6. *Family management styles/expectations for behavior* – client lives in a family environment where: (a) the youth occasionally breaks rules, expectations are not always clear and enforcement of rules is inconsistent (moderate); or (b) it is chaotic: discipline is lacking, inconsistent or tends to be extreme (lax or very strict); the child and/or siblings tend to set the parameters for family life; rules are regularly ignored (severe).	49%
7. *Family mobility* – client lives in a family that either: (a) has moved within the last 3 years (moderate); or (b) tends to move from one location to another within short periods of time and has moved 2 or more times in the last 3 years (severe).	47%
8. *Relationship with peers* – the client either: (a) has isolated negative experiences as a victim or bully; has distant friendships or tends to have friends who are a different age group or gender (moderate); or (b) is consistently alienated from peers either as a victim of bullying or constant teasing or because of displays of intimidation or physical aggression (severe)	46%
9. *Family history of mental illness* – client with: (a) family members (not immediate family) with a mental illness or a family member reports a history of mental illness not substantiated with a diagnosis (moderate); or (b) a parent or siblings who have a history of mental illness (severe).	43%
10. *Externalizing behaviors* – client exhibits either moderate or significant issues regulating anger and aggressiveness.	40%

Factors Influencing Problem Severity. One reliable method for approximating the severity of issues at intake is to calculate the total WellBAT score, which is the sum of all WellBAT ratings (i.e. scores of 0, 1, and 2 for all 37 rubrics; **Table I.6** below).

Variation by Household Income. Extreme poverty is the strongest predictor of intensity of service needs; CREST clients who lived in the poorest families (with household incomes of less than $20,000) experienced the most severe problems. This was a consistent phenomenon over time. The pronounced link between intense poverty and severity of need is the result of several factors. Poorer families tend to have more limited access to support services. Poverty itself is a significant stressor, associated with frequent mobility, a higher percentage of families with single parents working multiple jobs, and other issues that serve to undermine the resilience of children.

Table I.6: Variation of Total Client WellBAT Scores at Intake

	Average Total Score at Intake		
Annual Household Income			
	Entire Project	*1st Year of Services*	*Last Year of Services*
< $20,000	18.9	18.4	16.8
$20,000- $34,999	15.3	14.5	13.7
$35,000-$49,999	12.8	14.1	13.5
$50,000+	11.9	13.9	5.0
School District/MOST Clinician			
Jordan-Elbridge	11.4	9.6	14.4
Cato-Meridian	15.2	15.2	13.5
Union Springs	17.9	16.5	17.5
Port Byron	18.2	21.3	14.8
Gender			
Female	14.8	15.0	13.9
Male	16.3	16.3	15.8

As seen in **Table I.6**, there was a significant variation of service needs of clients by district over the course of the project. However, the differences among districts diminished substantially by the last year of the project. There was also a significant variation in WellBAT scores by gender – throughout the course of the project, male CREST clients at intake were considerably more at risk than female clients. There was *no variation of service* needs by special education status or grade.

II. CREST Activities and Adherence to the MOST Model

It is well established that, particularly for therapeutic interventions, a higher level of fidelity to proven practices and procedures leads to a greater level of program efficacy. Gauging the level of fidelity to the MOST CREST model is a critical part of the YPI evaluation.

There are three sources of data for this phase of the evaluation:

1. Project activity data stored in the CHARI (Children At-Risk Interagency) database;
2. Interviews and focus groups with school and project staff; and
3. Parent surveys.

These various sources of information, discussed below, indicate that during all three project years *CREST staff has maintained a high level of fidelity to the proven MOST model across its salient components.*

Service Integration and Case Management. Under the MOST model, clinicians must provide each client and, where appropriate, household members with an integrated service plan that provides referrals for unmet service needs as indicated in the WellBAT.

- *Referrals for Services.* Clinicians routinely developed integrated service plans and referred clients and family members for community-based collateral services. In the 193 cases that were closed and completed during the 2.5 years of service delivery, CREST clinicians made an average of 1.9 referrals per case for collateral services (363 referrals in 193 closed cases).

- There was a significant increase over time in the extent to which CREST clinicians made referrals for collateral services. During the first year of service delivery, clinicians averaged 1.8 referrals per closed case. During the last year, that increased to 2.1 referrals.
- Over the course of the project, there were no significant variations in levels of referrals for services by district, grade, gender, income or special education status.

- *Types of Referrals.* 52% of the referrals made by CREST staff were for family support interventions (such as Strengthening Families and summer recreational programming). 36% percent of referrals were made for mental health services, including counseling individual household member, Functional Family Therapy (FFT) and filial therapy.
  - This distribution of referrals did not vary markedly over time. Clearly, CREST clinicians were, throughout the project, working to address the deep family dysfunctions evidenced in the WellBATs.

Treatment Goals. For the 193 closed and completed cases, there was an average of 3.3 treatment goals established per participant, typically in three distinct treatment areas: mental health (39% of goals); family supports (32% of goals); and education (27% of goals). This pattern did not vary over time or by any demographic variable (such as gender, grade, family income, and so on).

These data, along with qualitative data, indicate that *CREST clinicians consistently adopt a comprehensive, multi-disciplinary approach to resolving their clients' problems*. CHARI data indicates, moreover, that clinicians routinely monitored all treatment goals to determine progress being made and adjusted treatment plans, when warranted, to improve the efficacy of the intervention.

Parent/Caregiver Involvement. Parents and caregivers exert an important influence on CREST outcomes. The success of the intervention depends to a great extent on their understanding of program components from the outset of the intervention, their involvement in and approval of its diagnostic and service coordination activities, and their efforts to reinforce the therapeutic strategies. The YPI parent/caregiver survey gauges the extent to which CREST has maintained fidelity to the model in these critical areas.

For the 193 cases that were closed and completed to date, 155 parents and caregivers completed surveys. The high participation rate ensured that respondents to the survey were in no way different from the entire population of parents/caregivers of youth who completed CREST services. Only in one sense, however, were the survey respondents distinguishable from the population of parents/caregivers as a whole – 84% were female. Over the course of the project, parent/caregiver responses did not vary markedly.

As seen in **Table II.1** below, *more than 7 in 10 parents and caregivers or "strongly agreed" (and 99% or more either "agreed" or "strongly agreed") that*:

1. CREST was thoroughly explained to them at the outset;
2. Their questions or concerns with the program were well addressed;
3. They were involved in the development of a service plan; and
4. They were encouraged by the MOST clinicians to be involved in the intervention.

Table II.1: Parent/Caregiver Understanding of the CREST Model and Involvement in Service Planning (N=155)

	Strongly Agree	***Agree***	***Disagree***	***Strongly Disagree***
CREST clinician thoroughly reviewed the program with parents/caregivers before services were provided.	86%	14%	0%	0%
Parent/caregiver questions and concerns about the program were satisfactorily addressed by the CREST clinician.	86%	14%	0%	0%
CREST clinician developed a service plan in a way that involved the parents/caregivers and other family members.	73%	27%	0%	0%
Parents/caregivers were encouraged to be involved in the CREST services provided to their children.	78%	21%	1%	0%

The CREST model and its constituent therapeutic approaches, Child Centered Play Therapy (CCPT) and Cognitive Behavioral Therapy (CBT), benefit from the involvement of the parents and caregivers. **Table II.2** below shows that *parental/caregiver involvement with the CREST intervention was frequent*.

Table II.2: Parent/Caregiver Involvement in CREST Services (N=155)

The frequency with which parents/caregivers…	***Daily***	***Weekly***	***Monthly***	***Several Times/Year***	***Never or Rarely***
Spoke with the CREST clinician regarding the progress their child was making.	3%	21%	56%	16%	4%
Spoke with their child regarding the progress he or she was making in MOST CREST.	9%	63%	17%	8%	3%
Spoke to other family members about the MOST CREST program.	6%	28%	27%	12%	27%
Participated in a CREST therapy session.	4%	9%	22%	13%	52%
Used any of the strategies suggested by the MOST clinician.	29%	38%	14%	10%	9%
Sought additional services for their child or themselves based on suggestions from the clinician.	10%	17%	23%	21%	29%

- *Monitoring Child's Progress.* 8 in 10 respondents reviewed the progress their children were making in the program with the CREST counselor on at least a monthly basis, 24% daily or weekly.
- *Discussing Intervention with Child and Other Family Members.* Parents/caregivers were even more inclined to discuss the intervention with their children, with more than 70% doing so at least weekly. Parents/caregivers were considerably less inclined to discuss the intervention with other family members, with one-third doing so at least weekly.
- *Employing Recommended Strategies.* Beyond monitoring the impact of MOST services on their children, parent/caregiver respondents indicated that they supported the intervention in other critical ways.
    - Nearly one-half (48%) of the respondents participated at least "several times" a year in therapy sessions with their children.
    - In addition, CREST clinicians imparted strategies to primary caregivers to enlist them as allies in the therapeutic intervention. Two-thirds of primary caregivers employed these strategies daily or weekly; less than 1 in 10 never used them.

- *Using Additional Services.* In order to help the family members of CREST participants address unmet service needs, project clinicians developed coordinated service plans and assisted primary caregivers in accessing needed programs and interventions. In this area, there was substantial success, with 7 of 10 parents/caregivers reporting they sought additional services for their children or themselves based on suggestions from MOST CREST clinicians (**Table II.2**).

Given that parents/caregivers found CREST clinicians to be responsive to their needs and accessible, and given, as reported below, that primary caregivers generally viewed the intervention as effective, it is not surprising that *parents and caregivers reported exceptionally high levels of satisfaction with the CREST program in general and with its clinical staff* (**Table II.3**).

Table II.3: Satisfaction of Parents/Caregivers with the CREST Program and Staff (N=155)

	Very Satisfied	***Somewhat Satisfied***	***Not at All Satisfied***
Satisfaction with the CREST program in general	90%	8%	1%
Satisfaction with the quality of the CREST counselor	97%	3%	0

III. PROGRAM OUTCOMES

YPI conducted a multi-faceted and systematic analysis of CREST outcomes. It analyzed, for closed and completed cases, four measures of program impact:

1. Clinical assessments of progress made by clients toward meeting treatment goals;
2. Levels of improvement as measured by a validated pre-and post-intervention mental health assessment, the Pediatric Symptom Checklist (PSC);
3. Changes in aggregate WellBAT scores over the course of CREST services; and
4. Parent/caregiver assessments of their children's progress as a result of CREST services.

In general, for those clients who have completed services and have their cases closed, *CREST had a substantial and positive impact*, improving the ability of clients to positively develop socially, emotionally, and educationally.

1. Progress Toward Meeting Treatment Goals. CREST clinicians determined the overall progress a client made toward reaching each treatment goal. For closed and completed cases, this determination was made at one of two points in time: when a goal was met during the intervention and, if not met, at the time when the case was closed.

Progress Toward Goals. *CREST clinicians reported that their clients made substantial progress toward meeting goals*, as indicated in **Table III.1** below. The level of progress charted may have been a shade optimistic, given the absence of any form of regression among closed and completed cases. However, as reported below, this perspective of CREST as having a significantly beneficial impact is generally confirmed by other evaluation data.

- For the 193 closed cases where services were completed, clinicians established 646 goals (3.3 per client). Over the course of the project, clinicians reported that:
  - ✓ 44% of their clients either met (34%) or made significant progress (10%) toward meeting their treatment goals (which were principally in the areas of education, mental health, and family).

- ✓ 26% of clients made moderate progress toward meeting their treatment goals by the time services were completed.
- ✓ 27% made a small amount of progress toward treatment goals.

Table III.1: Progress Toward Meeting Treatment Goals, Closed & Completed Cases (646 goals; 193 cases)

	% Goals Met	*% Significant Progress Toward Meeting Goal*	*% Moderate Progress Toward Meeting Goal*	*% Minor Progress Toward Meeting Goal*	*% Unchanged*	*% Failed to Cooperate or Minor to Significant Regression*
All Goals (N=646)	34%	12%	28%	21%	2%	1%
Mental Health Goals (N=254)	36%	12%	28%	23%	2%	1%
Education Goals (N=173)	32%	10%	24%	31%	2%	2%
Family Goals (N=206)	32%	6%	28%	32%	1%	1%

Variation by Treatment Area. While slightly more progress was made toward meeting mental health treatment goals than goals in other areas, the differences among treatment areas were not statistically significant.

Variation Over Time. *Over the course of the project, CREST clinicians reported that clients were making more progress toward meeting treatment goals (**Table III.2**).* This was not the result in any noteworthy change in the level or type of client service needs over time. It is clearly the case that clinicians at the end of the project were more likely to see improvement in reaching treatment goals than they were at the outset of the initiative. Thus, during the last year of the CREST project, 55% of clients were seen as having met or made significant progress toward meeting their treatment goals; during the first year of the project, 38% of clients were reported as making this level of progress.

Table III.2: Progress Toward Meeting Treatment Goals, Closed & Completed Cases: Change over Time

	% Goals Met	*% Significant Progress Toward Meeting Goal*	*% Moderate Progress Toward Meeting Goal*	*% Minor Progress Toward Meeting Goal*	*% Unchanged*	*% Failed to Cooperate or Minor to Significant Regression*
Entire Project (N=646 goals)	34%	12%	28%	21%	2%	1%
1st Year of Services (N=409 goals)	27%	11%	29%	30%	2%	1%
Last Year of Services (N=234 goals)	45%	10%	24%	31%	2%	2%

Variation by Client Characteristics. YPI analyzed the extent to which progress toward meeting treatment goals varied by client gender, household income, residential mobility, and the presence of special needs. *Over the course of the project, the level of progress made at meeting treatment goals was generally the same for all clients,* a sign of a truly mature and efficacious intervention. For example, even though male clients were more likely to have more severe problems than female clients, gender did not have an effect on the progress CREST clients made toward meeting treatment goals.

2. Pediatric Symptom Checklist (PSC). The PSC is a validated assessment instrument completed by primary caregivers and others who know the elementary school student well. It provides an accurate measure of psychosocial impairment, gauging the extent of both internalizing and externalizing disorders. For closed cases where services were completed, YPI analyzed the changes in the mental health status of CREST clients by comparing pre- and post-service PSC scores.

Change in Average Score. The average total score at intake, a composite measure of externalizing and internalizing mental health issues, was 19.5. At discharge, when the case was closed and completed, the average score was lower (i.e. improved), at 15.2. *Over the course of the project, average PSC scores from pre- to post-service improved by 22% as a result of the delivery of CREST services.*

Change Over Time. As measured by the PSC, the level of improvement experienced by CREST clients changed significantly over time. During the first year of services, average PSC scores from pre- to post-service improved by 19%; during the last year of CREST services, they improved on average by 28%. This confirms the findings noted above – *that CREST clinicians became more effective over time.*

Over the course of the project, for closed and completed cases:

- 71% of CREST clients had lower (i.e. improved) PSC scores;
- 6% had the same scores (i.e., no change); and
- 23% had higher (i.e. worsening) scores.

The PSC data indicates a somewhat lower success rate than that demonstrated in the mental health treatment goal data; nonetheless, it is clear that the CREST intervention had a substantial and positive effect on the mental health well-being of children.

Variation by Client Characteristics. A statistical analysis of the PSC outcomes indicates that the CREST intervention generally had a consistent effect regarding the mental health status of clients. Changes in PSC scores were not affected by gender, household income, residential mobility, and the presence of special needs.

3. Aggregate Wellbeing Assessment (WellBAT). As discussed above, the WellBAT is a 37-item validated assessment and service planning instrument, scored by a clinician who relies on a wide range of sources of information to administer the instrument.

Of those 37 items, 11 are, for all intents and purposes, measures of risk and resilience that are beyond the capacity of a CREST clinician to affect: school expectations for behavior; family histories of mental illness, substance abuse, and criminal activity; stability of household living arrangement; family mobility; school mobility; stressful events; child abuse; domestic violence; and exposure to violence. The remaining 26 WellBAT items, such as a student's sense of family and school belonging, temperament, peer relations, or externalizing behaviors, are, to greater and lesser extents, able to be influenced by a CREST clinician's assessment, service coordination, and counseling activities.

Each WellBAT item is scored as a "0" (resilience), "1" (moderate risk), or "2" (substantial risk). For the 26 items included in this portion of the outcome evaluation analysis, students most at risk would have a total score of 52, those most resilient, a total score of 0.

For closed cases where services were completed, YPI analyzed the changes in the overall risk and resilience of CREST clients in the areas that could be affected by the project clinicians by comparing the pre- and post-service total WellBAT scores for the 26 selected items.

Change in Average Scores. Over the course of the project, the average total WellBAT score at intake was 9.2; at discharge, the average score was 7.0. *The change in WellBAT scores from pre- to post-service indicates that clients experienced, on average, a 24% decline in their exposure to adversity as a result of CREST services.*

Change Over Time. As indicated by other measures of program impact, total WellBAT scores reveal that *CREST clinicians became more effective over time.* During the first year of services, there was, on average, a 23% decline in total WellBAT scores. During the last year of services, total WellBAT scores of clients declined (improved), on average, by 34%.

These data clearly indicate that *CREST services improved the ability of multiply at-risk children to acquire the resilience to thrive socially, emotionally, and academically* and that the effect of CREST on resilience became more profound over time.

4. Parent/Caregiver Assessments of Change. Parents and caregivers of MOST clients were surveyed at the close of services about their experience with CREST services and their child's progress as a result of participation in CREST.

- *A large majority (89%) of caregivers indicated in surveys that they were "very satisfied" with the progress of their children as a result of CREST services*; 11% were "somewhat satisfied", and none were dissatisfied.
- As seen in **Table III.3** below, primary caregivers found that CREST resulted in marked improvements in level of functioning across multiple contexts (individual, family, and school). In 6 of the 8 areas surveyed, a majority of primary caregivers reported that CREST had benefitted their child substantially ("a lot"). Two-thirds of respondents, for example, reported substantial improvements in the self-esteem of their children as a result of the intervention, as well as their ability to get along with family members.

Table III.3: Impact of CREST services on clients according to Parents/Caregivers (N=155)

Extent of improvement of their children during the year in their…	*% Reporting "A Lot" of Improvement*	*% Reporting "A Little" Improvement*	*% Reporting No Improvement*
Attitude toward school	62%	36%	1%
Abilities to get along with family members	67%	31%	2%
Self-esteem	68%	30%	2%
Self-confidence	66%	32%	2%
Ability to express and control emotions in positive ways	52%	46%	2%
Capacity to take personal responsibilities for their own behaviors	41%	54%	5%
Ability to manage stress and tension in healthy ways	49%	49%	2%
Willingness and ability to make safe and healthy choices	60%	37%	3%

CONCLUSION

CREST has achieved impressive results during its 2.5 years of providing services. A broad array of quantitative and qualitative data indicates that the project consistently identified an eligible client population with complex service needs that was likely to benefit from the intervention. By several measures, CREST program outcomes proved to have positive effects for most of the elementary students served by the program. Furthermore, the efficacy of the program improved over time. There is little doubt that CREST, to a substantial degree, promoted the positive social, emotional, and educational development of participating students.

For further information about this edition of *The CREST Reporter* or about the Youth Policy Institute's evaluation of the CREST Initiative, please contact:

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