

# Comprehensive Community Mental Health Services for Children and Their Families Program



## Evaluation Findings: Report to Congress 2009



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Substance Abuse and Mental Health Services Administration  
Center for Mental Health Services  
[www.samhsa.gov](http://www.samhsa.gov)





**The Comprehensive  
Community Mental Health Services for  
Children and Their Families Program  
Evaluation Findings**



**Report to Congress**

**2009**

**Center for Mental Health Services  
Substance Abuse and Mental Health Services Administration  
U.S. Department of Health and Human Services**

## **U.S. Department of Health and Human Services**

**Kathleen Sebelius**  
*Secretary*

### **Substance Abuse and Mental Health Services Administration**

**Pamela S. Hyde, J.D.**  
*Administrator*

### **Center for Mental Health Services**

**Kathryn Power, M.Ed.**  
*Director*

### **Division of Service and Systems Improvement**

**Fran Randolph, Dr.P.H.**  
*Director*

### **Child, Adolescent and Family Branch**

**Gary M. Blau, Ph.D.**  
*Branch Chief*

The Comprehensive Community Mental Health Services for Children and Their Families Program, Evaluation findings—Report to Congress, 2009 was written by staff at ICF Macro and Walter R. McDonald & Associates, Inc., pursuant to a contract (contract numbers 280-03-1603, 280-03-1604, 280-05-0135) under the direction of the Child, Adolescent and Family Branch, Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

# Table of Contents

<b>Program Overview.....</b>	<b>1</b>
Introduction .....	1
The System of Care Philosophy and Goals.....	2
System of Care Philosophy .....	2
System of Care Goals .....	3
CMHI Funding Phases .....	3
CMHI Grant Community Characteristics .....	4
General Community and Service Population Characteristics—Phases IV and V .....	4
General Community and Service Population Characteristics—Phase VI.....	5
National Evaluation of the CMHI .....	5
Studies of the National Evaluation .....	5
Performance Measurement.....	7
Description of Data Sample Analyzed .....	7
<b>Description of CMHI Children and Youth and Their Families.....</b>	<b>9</b>
Children and Youth Served in CMHI Grant Communities and Their Families .....	9
Children’s and Youths’ Experiences Prior to Entering the CMHI .....	10
Clinical Status of Children and Youth at Entry into the CMHI.....	11
Referral and Service Planning.....	12
<b>Longitudinal Outcomes .....</b>	<b>14</b>
Clinical Outcomes of Children and Youth.....	14
Behavioral and Emotional Strengths .....	14
Behavioral and Emotional Symptoms .....	15
Functional Impairment.....	16
Anxiety and Depression Symptoms .....	17
Clinical Outcomes of Young Children.....	19
Clinical Outcomes of Older Youth .....	20
Functional Outcomes of Children and Youth.....	21
Educational Outcomes .....	21
Stable Living Situations.....	22
Criminal Justice Outcomes.....	22
Physical Health Outcomes .....	24
Caregiver and Family Outcomes.....	24
Caregiver Strain .....	24
Caregiver Employment.....	24
<b>Experience With System of Care Services.....</b>	<b>26</b>
Amounts and Types of Services Received.....	26
Cultural Competence of Service Experience.....	27
Satisfaction of Caregivers and Youth with Services .....	28
Caregiver Interest in Information About Services .....	28
Caregiver Service Satisfaction and Increased Knowledge About Services .....	29

<b>Service Costs in the CMHI</b> .....	<b>31</b>
Cost Savings from Reduction in Inpatient Care.....	31
Cost Savings from Reduction in Juvenile Arrests.....	31
A Detailed Look at Services and Costs: A Case Study .....	32
<b>System-Level Assessment of the CMHI</b> .....	<b>36</b>
CMHI Grant Communities' Implementation of System of Care Principles .....	36
Communities Initially Funded in 2002–2003.....	36
Communities Initially Funded in 2005–2006.....	38
Community Health Providers' Knowledge and Attitudes About Evidence-Based Treatments.....	39
Advantages and Disadvantages of Evidence-Based Treatments.....	40
Implementation of Evidence-Based Treatments.....	41
Definitions of Evidence-Based Practice .....	41
Role of Pediatricians in the Provision of Mental Health Services .....	41
Pediatricians' Knowledge About and Involvement with the CMHI .....	41
Referrals to Mental Health Providers .....	41
Barriers to Connecting Children to Mental Health Services .....	42
Sustainability of CMHI Grant Communities .....	42
Achievement of Sustainability Goals .....	42
Strategies Used by Communities .....	43
<b>Summary</b> .....	<b>45</b>
<b>References</b> .....	<b>47</b>

## Appendices

- A. Glossary of Terms
- B. System of Care Communities of the Comprehensive Community Mental Health Services for Children and Their Families Program, 1993–2008
- C. Description of Study Components
- D. Measures
- E. Performance Measurement
- F. Descriptive and Outcomes Data Tables
- G. Data Analysis Techniques Used in This Report

## Program Overview

### Introduction

The Comprehensive Community Mental Health Services for Children and Their Families Program (the Child Mental Health Initiative) is a cooperative agreement program operating under the auspices of the Child, Adolescent and Family Branch (CAFB) in the Center for Mental Health Services (CMHS), Substance Abuse and Mental Health Services Administration (SAMHSA) of the Department of Health and Human Services. The Child Mental Health Initiative (CMHI) provides funds to public entities to promote the transformation of the mental health care system that serves children and youth (aged 0–21 years) diagnosed with a serious emotional disturbance and their families. It does this by funding the development and implementation of comprehensive and coordinated systems of care in States, local communities, U.S. territories, and American Indian/Alaska Native communities.

Children and adolescents with serious emotional disturbance face challenges in many aspects of their daily lives. They are at greater risk for substance abuse disorders (CMHS, 2002; Holden, 2003; Holden et al., 2003; Liao, Manteuffel, Paulic, & Sondheimer, 2001; Substance Abuse and Mental Health Services Administration, 2002) and negative encounters with the juvenile justice system (CMHS, 2002; Davis & Vander Stoep, 1997). Students with emotional disturbance fail more courses, earn lower grade point averages, miss more days of school, are retained at grade more than students with other disabilities, and have high dropout rates (Epstein, Nelson, Trout, & Mooney, 2005; U.S. Department of Education, 2001). Research by Friedman, Kutash, and Duchnowski (1996) further supports assertions for poor long-term

outcomes for these children and adolescents, indicating a significant correlation between childhood emotional disorders and problems in adulthood. Services that exist to address these issues are often inconsistent; they are often provided by a variety of professionals who work in diverse, relatively independent, and loosely coordinated public and private facilities, agencies, and systems often referred to as the *de facto mental health service system* (U.S. Department of Health and Human Services, 1999). Therefore, families are challenged with obtaining services, and children and youth are left at risk for difficulties in school and/or in the community.

Systems of care are intended to build on the individual strengths of the children, youth, and families being served to address their service needs. Systems of care also reduce service disparities by promoting cultural and linguistic competence and responsiveness. The funding for the program was \$4.9 million at its inception in 1993; the cumulative investment through fiscal year (FY) 2009 is approximately \$1.4 billion. The CMHI has awarded 144 grants and cooperative agreements to communities.

Communities were funded through a grant mechanism until 2002, when the funding mechanism switched to a cooperative agreement. For simplicity, the term “grant community” is used here to describe all communities that received and/or are receiving CMHI funds, through either grants or cooperative agreements. Numerous types of entities may apply for CMHI cooperative agreements, including State governments, governmental units within political subdivisions of a State (e.g., county, city, town), the District of Columbia, Indian Tribes or Tribal organizations, and U.S. territories. The cooperative agreements are

funded on a matching basis over a 6-year period. During the first 3 years of the agreement, CMHS matches organizational funding at a 3-to-1 level. In the fourth year, there is a dollar-to-dollar match. During the fifth and sixth years, CMHS provides \$1 for every \$2 spent by the grant community.

The CMHI provides resources to communities to develop their systems of care to best address the needs of children and youth who experience serious mental health challenges, and their families. The grants and cooperative agreements have supported increased capacity for services and improved service provision in communities across all 50 States, Puerto Rico, and Guam, and in 18 American Indian/Alaska Native communities. The majority of children and youth served in the CMHI-funded systems of care described in this report represented non-White racial and ethnic groups, and more than half of the children and youth lived in poverty. The children and youth receiving services presented with a range of behavioral and emotional challenges, including delinquency, and suicide ideation and attempts. Many children and youth had clinical diagnoses of depression, anxiety disorders, and attention-deficit/hyperactivity disorder.

The legislation authorizing the CMHI also mandated a national evaluation of the initiative to describe, monitor, and chronicle its progress (Public Law 102–321). This *Report to Congress* presents findings derived from the national evaluation of 59 CMHI grant communities funded in FYs 2002–2006. It includes topics such as mental health and quality of life outcomes achieved for children and youth and their families, community implementation, and services and associated service costs. A glossary of terms is included as Appendix A.

## The System of Care Philosophy and Goals

The CMHI was shaped by several Federal and State initiatives, beginning with the Child and Adolescent Service System Program (CASSP) (see Stroul & Friedman, 1986, for a comprehensive discussion of the program’s background). CASSP was a national effort designed to help States and communities build comprehensive, community-based systems of care that were youth and family focused. This approach has since become the cornerstone of many mental health service delivery programs within communities across the country and in its territories.

The Federal Action Agenda (SAMHSA, 2005) was the product of a collaborative effort of the Departments of Health and Human Services; Education; Housing and Urban Development; Justice; Labor; Veterans Affairs; and the Social Security Administration. It was intended to develop a common national mandate for mental health services. The CMHI models the principles outlined in that document, which asserted that the mental health service delivery system must focus its efforts on helping children and youth with serious emotional disturbance to “. . . live, work, learn, and participate fully in their communities.” SAMHSA’s use of the system of care philosophy as the approach for CMHI funding has made a substantial contribution to the fulfillment of this mandate.

### System of Care Philosophy

Underlying the system of care approach is the belief that services should be both comprehensive and coordinated among public and private providers, consumers, and other key constituents. When this comprehensive and coordinated system is in place, it is anticipated that resulting services and supports will (1) be effective; (2) build on the strengths of the individual; and (3)



address each person's unique physical, emotional, social, cultural, intellectual, and linguistic needs. When mental health services achieve these objectives, children and youth are able to live, grow, learn, work, and participate in the communities in which they reside. The system of care approach embodies eight guiding principles for service provision:

- Family driven
- Individualized, strengths-based, and evidence-informed service plans
- Youth guided
- Culturally and linguistically competent
- In the least restrictive environment possible
- Community based
- Accessible
- Through a collaborative and coordinated interagency network

### System of Care Goals

With the system of care philosophy and principles as the theoretical underpinning for the CMHI, the following goals were developed for CMHI grant communities:

- Expand community capacity to serve children and youth with serious emotional disturbance and their families.
- Provide a broad array of accessible, clinically effective, and fiscally accountable services, treatments, and supports.
- Promote broad-based, sustainable systemic change inclusive of policy reform and infrastructure development across the country, including U.S. territories.

- Create care management teams to implement an individualized service plan for each child.
- Deliver culturally and linguistically competent services with special emphasis on racial, ethnic, linguistically diverse, and other underrepresented, underserved, or invisible cultural groups.
- Implement the full participation of youth and families in service planning; in the development, evaluation, and sustainability of local services and supports; and in overall system transformation activities.

These goals help frame communities' strategies for implementing a system of care that taps into the strengths and addresses the needs of the children, youth, and families who are served.

### CMHI Funding Phases

Table 1 shows the seven phases of CMHI over the life of the program. Communities initially funded from FY 1993 to FY 2003 have completed their funding cycles and are now considered "alumni" or "graduated communities." Phase IV grant communities funded in FY 2004 and Phase V grant communities funded in FYs 2005 and 2006 are in their later years of funding. Phase VI and Phase VII grant communities began to receive funds in FY 2008 and FY 2009, respectively. CMHI grants or cooperative agreements were not awarded in every year. A complete list of CMHI grant communities across all phases is provided in Appendix B.



**Table 1: System of Care Phases and Years of Funding**

Phase	Year Initially Funded	Number of Communities	Status
I	1993–1994	22	Graduated
II	1997–1998	23	Graduated
III	1999–2000	22	Graduated
IV	2002	18	Graduated
	2003–2004	11	Receiving Funds
V	2005–2006	30	Receiving Funds
VI	2008	18	Receiving Funds
VII	2009	20	Receiving Funds

## CMHI Grant Community Characteristics

This report summarizes data collected from the CMHI grant communities funded in Phases IV and V. The characteristics of these communities, as well as the Phase VI communities, are summarized in this section. All currently funded communities are described; however, data are not presented for Phase VI communities since these have not yet submitted data.

### General Community and Service Population Characteristics—Phases IV and V

CMHI grant communities are characterized by diverse populations of focus, including diversity in racial and ethnic groups, underserved groups, language, age, geographic size, and population density. For example, the service populations of some CMHI communities are Hispanic/Latino, or African American, and four cooperative agreements were awarded in 2005 and 2006 to American Indian Tribal organizations. Additionally, a broad range of languages is spoken in the CMHI communities, including Creole, Cantonese, French, Filipino, Portuguese, Spanish, Vietnamese, and a variety of American Indian languages.

Some CMHI communities received their cooperative agreements to expand existing system of care services to underserved populations. For example, Placer County, California, received its CMHI cooperative agreement in 2005 specifically to expand its existing system of care (developed with county funds) to American Indian and Hispanic/Latino children, youth, and families.

Other populations include children or youth of specific ages (e.g., 0–8 years or transition-to-adulthood age youth), or those with a specific service need (e.g., at risk for homelessness or out-of-home placement, or with co-occurring mental health and substance abuse disorders).

Grant community service areas also vary dramatically in geographic size and population density. The largest are the islands of Guam and Puerto Rico, and States such as Idaho and Oklahoma. Urban CMHI communities such as Los Angeles County, California, and Harris County, Texas, address the needs of diverse service populations that span large geographic areas. Others—such as three counties in Maine—encompass both urban and rural service areas. Some are single counties or parishes, or small sub-communities of metropolitan areas. Still others are completely rural, such as Maury County, Tennessee, and face unique challenges in providing access to services.

Many funded communities have an existing infrastructure for, or a history of, integrated service delivery operation according to system of care principles. These efforts prior to obtaining the current CMHI cooperative agreement might have been funded by previous CMHI grants to the same State or may have been implemented using non-CMHI funding.

### **General Community and Service Population Characteristics—Phase VI<sup>1</sup>**

In September 2008, 18 communities received CMHI funding. Several communities received SAMHSA grants in prior phases and are expanding their systems of care into new geographic areas or to previously underserved populations. As in prior phases, most communities are ethnically and racially diverse, although some are comprised predominantly of a specific ethnic or racial group, such as American Indians served by Tribal grantees.

Like previous phases, communities are located across the country, and vary in size and population focus. Five are statewide systems, 10 are county based, and three are Tribal. Additionally, several communities serve special populations, including communities that concentrate on early childhood clients, transition-age youth, and youth involved in the child welfare and/or juvenile justice systems. Several communities plan to focus efforts on reaching out to underserved populations such as African American; American Indian/Alaska Native; Hispanic/Latino; or Lesbian, Gay, Bisexual, Transgender, Questioning, Intersex, and Two-Spirit (LGBTQI2-S) children and youth and their families. At least three communities are conducting outreach specifically to children and youth and their families living in rural areas, and one is located in a large urban area.

## **National Evaluation of the CMHI<sup>2</sup>**

The national evaluation was mandated as part of the legislation that created the CMHI, and is an important component of the CMHI. Grant communities in all phases have agreed to participate in the national evaluation of the CMHI as part of their agreement with SAMHSA. The national evaluation has been designed to provide information on (1) the mental health outcomes of children and youth, and their families; (2) the implementation, process, and sustainability of systems of care; and (3) critical and emerging issues in children's and youths' mental health. Findings from the national evaluation have informed service delivery and treatment, program funding decisions, and modifications to existing U.S. mental health policies related to service systems. The national evaluation has provided the CMHI with monitoring and performance data throughout the life of the CMHI and has provided evidence demonstrating its achievements.

### **Studies of the National Evaluation**

The national evaluation consists of both core and special studies. Core studies are listed in Table 2. The descriptive study provides demographic information on the children and youth and their families served in CMHI-funded systems of care. The longitudinal study provides an assessment of changes over time in clinical and other outcomes of children and youth and their families. For these two studies, data are collected from youth and caregivers who agree to participate in the evaluation, starting at intake into the program and again at 6-month intervals over 2 or 3 years, depending on the phase. This longitudinal approach enables the national evaluation to examine clinical and functional outcomes for children and youth, and family and caregiver outcomes across time.

Other core studies examine the service experience of families, services provided to children and youth and their families, and the costs of those services. Still others examine the development and implementation of the

infrastructure and service delivery systems of the systems of care based upon the system of care philosophy and principles, and the long-term sustainability of such systems.

**Table 2: National Evaluation Core Components**

<b>Study</b>	<b>Definition</b>
<b>Cross-Sectional Descriptive Study</b>	Describes the children and youth enrolled in the funded systems of care in terms of their demographics, functional status, living arrangements, diagnoses, risk factors, and mental health service histories.
<b>Longitudinal Child and Family Outcome Study</b>	Examines changes in children's/youths' clinical and functional status and family life, including symptomatology, diagnosis, social functioning, substance use, school attendance and performance, delinquency, stability of living arrangements, and caregiver outcomes.
<b>Service Experience Study</b>	Examines the types of services received by children, youth, and families, as well as youth and family ratings of satisfaction with services provided.
<b>Services and Costs Study</b>	Describes detailed service events of children, youth, and families; their utilization patterns; and associated costs. The study assesses also the extent to which information about various services is captured through local management information systems.
<b>System of Care Assessment</b>	Examines whether programs have been implemented according to system of care program theory, and documents how systems develop over time in terms of this theory.
<b>Sustainability Study</b>	Explores the extent to which systems of care are maintained after funding from the CMHI has ended. The study identifies features of systems of care that are more likely to be sustained and factors that contribute to or impede the ability to sustain the CMHI-funded systems of care.

Studies on special topics include, but are not limited to, examinations of cultural competence in the structure and provision of services, the use of evidence-based practices and treatments, and the role of primary care health providers in systems of care. Table 3 lists active special studies whose findings are described in this report. Special studies have provided the data for the national evaluation

to address emerging needs of the CMHI related to evidence-based practice and practice-based evidence, provider practices, collaboration between pediatricians and mental health providers, and comparisons between children and youth receiving services by grant programs and those receiving services elsewhere.

**Table 3: National Evaluation Special Studies Active in FY 2009**

<b>Study</b>	<b>Definition</b>
<b>Evidence-Based Practices Study</b>	Examines the effect of various factors on the implementation of evidence-based practices in systems of care.
<b>Primary Care Provider Study</b>	Investigates the role of primary health care providers in systems of care and factors that facilitate and hinder the interaction between primary care providers and mental health providers.

New initiatives related to program improvement and system transformation are also being evaluated and refined. One such initiative is an Alumni Network organization and Web site to facilitate the ability of CMHI graduate communities to mentor current communities, and for alumni communities to foster their own sustainability efforts. Another is the Continuous Quality Improvement (CQI) Initiative designed to foster continuous organizational assessment of communities' systems of care. Detailed descriptions of the studies and initiatives listed in Tables 2 and 3 can be found in Appendix C. Instruments used for data collection are described in Appendix D.

## Performance Measurement

The national evaluation also provides important feedback to the CAFB, communities, and technical assistance providers to strengthen program efforts at all levels.

Improvements in program outcomes, as evidenced by the Government Performance and Results Act (GPRA) of 1993 indicators, are noteworthy. GPRA serves to hold government agencies accountable for program development, implementation, and sustainability, and encourages the use of feedback for infrastructure and service-level change. The CMHI GPRA measures are reported in Appendix E. Although the GPRA measures themselves are not examined as part of the national evaluation, similar measures and data are examined.

In addition, at the request of SAMHSA, the national evaluation developed a *Continuous Quality Improvement (CQI) Progress Report* to document program performance at the community and national levels and to assist communities in furthering program goals of continuous quality improvement. The first reports were produced in 2006. Domains of

program performance addressed in these reports include (a) system-level outcomes, (b) child and family outcomes, (c) satisfaction with services, (d) family and youth involvement, and (e) cultural and linguistic competence. These indicators, which capture performance in areas such as service access, school performance, suicide attempts, youth arrests, caregiver employment, satisfaction with services, and provider cultural and linguistic competence, align with SAMHSA's National Outcome Measures (NOMs). See Appendix F for the aggregate *CQI Progress Reports* for Phases IV and V.

## Description of Data Sample Analyzed

The findings discussed in this report are based on data collected from intake records, in interviews with youth and caregivers who received services in grant communities funded in Phases IV and V (2002–2006), in interviews with various community staff, and from financial records providing information on services and costs. Data from all communities included in Phase IV were analyzed for this report, even though the 2002 communities had graduated in 2008, for consistency's sake.

Descriptive data were collected from 24,524 children and youth enrolled in these CMHI grant communities. Longitudinal data were collected from 7,533 caregivers and 4,061 youth aged 11 years and older who participated in the Longitudinal Child and Family Outcome Study.

Throughout this report, the term "child" refers to children younger than 11 years old, whereas the term "youth" refers to children aged 11–21 years.

Many findings are based on interviews with youth and caregivers at multiple time points (i.e., at intake and at 6, 12, 18, and 24 months after intake). Findings in those sections are

based on analyses of data from youth or caregivers who completed all four follow-up interviews.<sup>3</sup> Sample sizes for different analyses vary, as not all caregivers responded to all items. Most sections of the report discuss findings based on data aggregated across Phases IV and V, and findings from various subsets of the data are presented when appropriate. These findings are based on data submitted as of June 30, 2009.

All findings discussed in this report were statistically significant at the  $p < .05$  level, and many findings were statistically significant with even smaller p-values. P-values provided beneath figures apply to all trends represented in the figure. Appendix G provides a detailed description of the statistical methods used in these analyses.

## Description of CMHI Children and Youth and Their Families

### Children and Youth Served in CMHI Grant Communities and Their Families

Children and youth served in CMHI grant communities differed demographically from children and youth in the general population (see Table 4). In comparison to those of similar age in the national population, children and youth who received services through CMHI systems of care were more likely to be male (62.9 percent compared to 51.2 percent in the national population), to be younger than 16 years (81.1 percent compared to 68.8 percent), and to belong to a non-White racial group (59.7 percent

compared to 42.3 percent). These figures are consistent with CMHI goals to reach populations that often have limited access to mental health services. In particular, the proportion of American Indian/Alaska Native children and youth served in the Phase IV and V CMHI grant communities was more than four times the percentage of American Indian/Alaska Native children and youth in the general population (4.4 percent compared to 0.9 percent). Similarly, the percentage of African-American children and youth served in the Phase IV and V CMHI grant communities was almost twice the percentage in the general population (24.1 percent compared to 14.6 percent).<sup>4</sup>

**Table 4: Gender, Age, and Race/Ethnicity Frequencies: CMHI Population Compared to the U.S. Population**

Gender, Age, and Race/Ethnicity	CMHI Grant Communities Initially Funded in 2002–2006	U.S. Population 2006 <sup>a,b</sup>
<b>Gender</b>	<i>n</i> = 24,335	
Male	62.9%	51.2%
Female	37.1%	48.8%
<b>Age</b>	<i>n</i> = 24,209	
0–5 year	13.4%	26.0%
6–11 years	30.1%	25.0%
12–15 years	37.6%	17.8%
16–21 years	18.9%	31.2%
<b>Race/Ethnicity</b>	<i>n</i> = 23,884	
American Indian or Alaska Native	4.4%	0.9%
Asian	1.3%	3.9%
Black or African American	24.1%	14.6%
Native Hawaiian or other Pacific Islander	1.4%	0.2%
White	40.3%	57.7%
Hispanic/Latino	24.0%	20.2%
Multi-Racial	4.2%	2.5%
Other	0.3%	—

<sup>a</sup> Gender and age data taken from U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Bridged-Race Population Estimates, United States July 1st resident population, compiled from 2000 to 2007 (Vintage 2007) bridged-race postcensal population estimates, on CDC WONDER On-line Database for the year 2006. Accessed August 11, 2009, at <http://wonder.cdc.gov/bridged-race-v2007.html>.

<sup>b</sup> Race/ethnicity data taken from U.S. Census Bureau: National population estimates, by age, sex, race and Hispanic origin: Monthly postcensal resident populations, from July 1, 2000, to July 1, 2006, by age, sex, race, and Hispanic origin. Available from: [www.census.gov/popest/national/asrh/2005\\_nat\\_res.html](http://www.census.gov/popest/national/asrh/2005_nat_res.html) (data for April 1, 2000 and July 1, 2006). Published in National Center for Health Statistics Health, United States, 2007 With Chartbook on Trends in the Health of Americans. Hyattsville, MD: 2007.

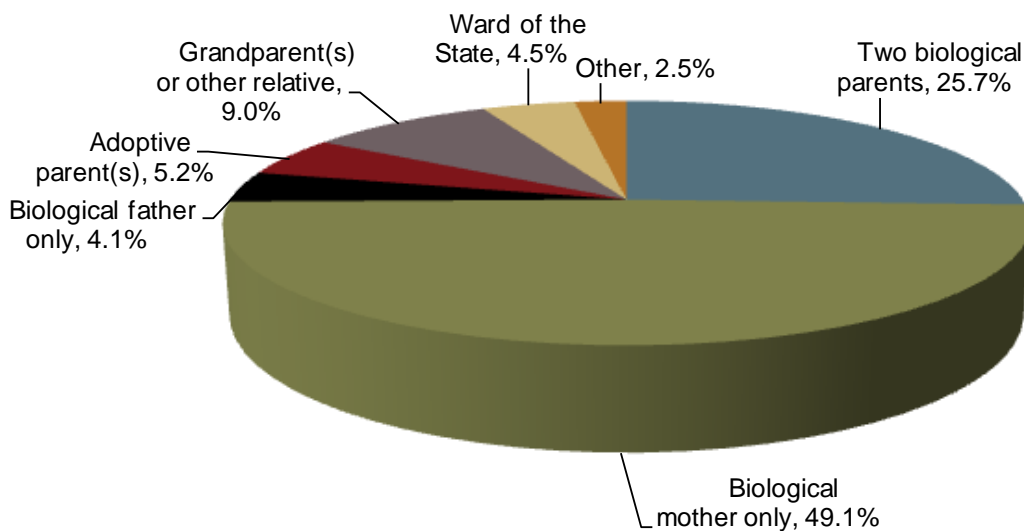


The proportion of Hispanic and Latino children and youth served in CMHI grant communities was about the same as in the U.S. population.

Nearly all children and youth served in CMHI grant communities (93.0 percent) were in the custody of a parent or other relative (see Figure 1). Only one-quarter (25.7 percent) were in the legal custody of both biological parents, as compared to 69.4 percent in the U.S. population,<sup>5</sup> whereas

about one-half (49.1 percent) were in the care of their mothers only. More than one-half of the children and youth (57.6 percent) were living in poverty. This percentage is more than three times the national average of 17.2 percent for all children and youth aged 0–17 years.<sup>6</sup> Almost one-half of caregivers (45.5 percent) reported that they had not been employed during the 6 months prior to their children’s entry into services provided in a CMHI grant community.<sup>7</sup>

**Figure 1: Legal Custody of Children and Youth at Intake, Grant Communities Initially Funded in 2002–2006**



More than 90 percent of children and youth participating in the national evaluation (93.3 percent) attended school in the 6 months prior to beginning services provided through a CMHI-funded system of care. However, absenteeism was an issue—40.1 percent of children and youth were absent from school at least once a month, on average, in the 6 months prior to beginning services through a CMHI-funded community.

### **Children’s and Youths’ Experiences Prior to Entering the CMHI**

Many children and youth had personal and family background factors associated with

mental health challenges. According to caregiver interviews, prior to intake, 22.4 percent of children and youth had experienced physical abuse, 15.8 percent had been sexually abused, 28.1 percent had run away at least once, 12.2 percent had attempted suicide, and 15.3 percent had a history of drug or alcohol problems. More than one-half (54.9 percent) had had one or more of these experiences. Regarding household risk factors, almost one-half (46.7 percent) of children and youth had been exposed to domestic violence, according to caregiver reports, and approximately one-third (34.2 percent) lived in a household where someone had been convicted of a crime.

Most children and youth receiving services in CMHI-funded communities (85.2 percent) had other family members with some type of mental illness. Approximately 70 percent were reported to have a biological family member with depression, and 46.4 percent had a biological family member with another type of mental illness. In addition, 61.6 percent had a biological family member who abused drugs or alcohol.

### Clinical Status of Children and Youth at Entry into the CMHI

Children and youth exhibited a variety of mental health disorders and behavior problems at entry into services; these included problems exhibited by the children and youth, as well as clinical diagnoses assigned by professionals. Conduct or delinquency-related problems were identified as presenting problems for more than one-half (57.0 percent) of the children and youth. Children and youth also presented with hyperactivity and attention deficit (37.7 percent), depression (35.0 percent), school performance problems (32.5 percent),

adjustment disorder (31.9 percent), anxiety (28.1 percent), and attempted or contemplated suicide (16.3 percent).

Children and youth served in CMHI-funded systems of care had a range of clinical diagnoses assigned by mental health clinicians. These diagnoses were defined using the *Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood: Revised Edition* (DC:0–3R; ZERO TO THREE, 2005) and the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM–IV; American Psychological Association, 1994). Clinical diagnoses of children and youth served in CMHI grant communities are presented in Tables 5a and 5b. Table 5a shows that the most common DC:0–3R diagnoses were adjustment disorders (20.7 percent), sensory stimulation-seeking/impulsive disorder (17.0 percent), anxiety disorders (13.0 percent), and hypersensitivity (10.0 percent).<sup>8</sup> Table 5b shows that the most common DSM–IV diagnoses were mood disorders (35.2 percent), attention-deficit/hyperactivity

**Table 5a: Clinical Diagnoses at Intake\***

DC:0–3R Axis I Diagnosis	(n = 377)
Adjustment Disorders	20.7%
Sensory Stimulation-Seeking/Impulsive	17.0%
Anxiety Disorders	13.0%
Hypersensitive (Fearful/Cautious, Negative/Defiant)	10.0%
Posttraumatic Stress Disorder	6.7%
Deprivation/Maltreatment Disorder	4.6%
Regulation Disorders of Sensory Processing	3.9%
Mixed Disorders of Emotional Expressiveness	3.9%
Disorders of Relating and Communicating	3.0%
Depression	2.3%
Hyposensitive/Underresponsive	2.1%
Multi-System Developmental Disorder (MSDD)	1.9%
Disorders of Affect	1.6%
Sleep Onset Disorder	1.6%
Prolonged Bereavement/Grief Reaction	1.2%
Feeding Disorders	0.9%
Other	10.4%

\* Percentages do not sum to 100% because each child or youth might have more than one diagnosis.

**Table 5b: Clinical Diagnoses at Intake\***

<b>DSM-IV Axis I and II Diagnosis</b>	<b>(n = 19,677)</b>
Mood Disorders	35.2%
Attention-Deficit/Hyperactivity Disorder (ADHD)	31.7%
Oppositional Defiant Disorder	23.3%
Adjustment Disorders	13.9%
Posttraumatic Stress Disorder and Acute Stress Disorder	8.7%
V Code	7.6%
Anxiety Disorder	7.8%
Substance Use Disorders	6.3%
Disruptive Behavior Disorder	6.9%
Conduct Disorder	5.9%
Learning, Motor Skills, and Communication Disorders	3.8%
Autism and Other Pervasive Developmental Disorders	3.1%
Impulse Control Disorders	2.6%
Mental Retardation	2.3%
Schizophrenia and Other Psychotic Disorders	2.2%
Personality Disorders	1.0%
Substance-Induced Disorders	0.3%
Other	10.4%

\* Percentages do not sum to 100% because each child or youth might have more than one diagnosis.

disorder (31.7 percent), oppositional defiant disorder (23.3 percent), and adjustment disorders (13.9 percent).<sup>9</sup>

Almost one-half of the children and youth (47.6 percent) were taking at least one medication for behavioral or emotional symptoms at entry into services.

## Referral and Service Planning

Children and youth with mental health disorders and their families often have complex needs that can benefit by being addressed by multiple service sectors in an organized and efficient manner. A system of care approach encourages communities' major child- and youth-serving agencies to collaborate in order to improve outcomes for such children and youth. The first step of such collaboration can be considered referral to services provided in CMHI-funded systems of care.

Approximately one-fourth of the children and youth (26.1 percent) were referred to services

in communities funded by the CMHI by a mental health agency, clinic, or provider.<sup>10</sup> One-fifth (21.3 percent) were referred by schools, and 15.5 percent by a child welfare agency. Juvenile corrections, courts, or probation referred 11.5 percent, and caregivers referred 10.8 percent. These findings suggest that child- and youth-serving agencies were working together in grant communities.

The system of care approach revolves around service planning meetings that involve those concerned with a particular child's or youth's treatment. These meetings generally include service providers, family members, and other community members. Caregivers participated in almost all (90.0 percent) of the service plan development meetings, and children or youth participated in more than three-fourths (77.3 percent). Other family members participated in nearly one-third (31.5 percent), and family advocates participated in one-fifth (21.3 percent) of the meetings. The CMHI approach of family-driven, youth-guided, and individualized service planning

is supported by these findings. It is particularly encouraging that such a high percentage of the children and youth participated in their own service planning meetings.

Among child- and youth-serving agency workers and other professionals, mental health service case managers were the most likely to participate in service planning meetings (76.3 percent). Approximately one-third (36.4 percent) of service planning meetings were attended by a therapist, and slightly less than one-fifth (17.7 percent) of meetings included other mental health staff. Other child- and youth-serving agency representatives also participated in service plan development meetings, including

educational (16.8 percent) and child welfare professionals (11.9 percent), juvenile justice representatives (8.7 percent), and medical providers (3.8 percent). The level of participation of different types of providers largely reflects differences in the service providers involved in the children's and youths' care. For example, the high percentage of service planning meetings that involved case manager participation is consistent with the percentage of children and youth who had a case manager or care coordinator, as discussed later in this report. The involvement of child- and youth-serving agencies in service planning also indicates that these agencies were starting to work together to provide care.

### Summary

- Children and youth served in CMHI-funded systems of care were mostly male, tended to belong to non-White racial groups, and came from families that were more likely to live at or below the poverty level than above the poverty level.
- Most of the children and youth served had had one or more experiences in their lives that are associated with greater risk for mental health challenges.
- Many of the children and youth lived in family situations that put them at greater risk for later mental health challenges.
- More than one-half of the children and youth exhibited conduct or delinquency-related problems when entering the system of care.
- About one-fourth of the children and youth were referred to services in CMHI-funded communities by a mental health agency, clinic, or provider, although other community agencies, particularly schools, were responsible for a substantial proportion of referrals. Educational professionals also participated in a considerable proportion of service planning meetings, along with mental health professionals.
- Most children and youth participated in their own service planning meetings.

## Longitudinal Outcomes

Data in this section were obtained through interviews with caregivers and youth who agreed to participate in the Longitudinal Child and Family Outcome Study. Participating youth and caregivers provided information at intake into the program and every 6 months thereafter, although this section presents findings summarized for the first 12-month and 24-month periods after entry into systems of care.

### Clinical Outcomes of Children and Youth

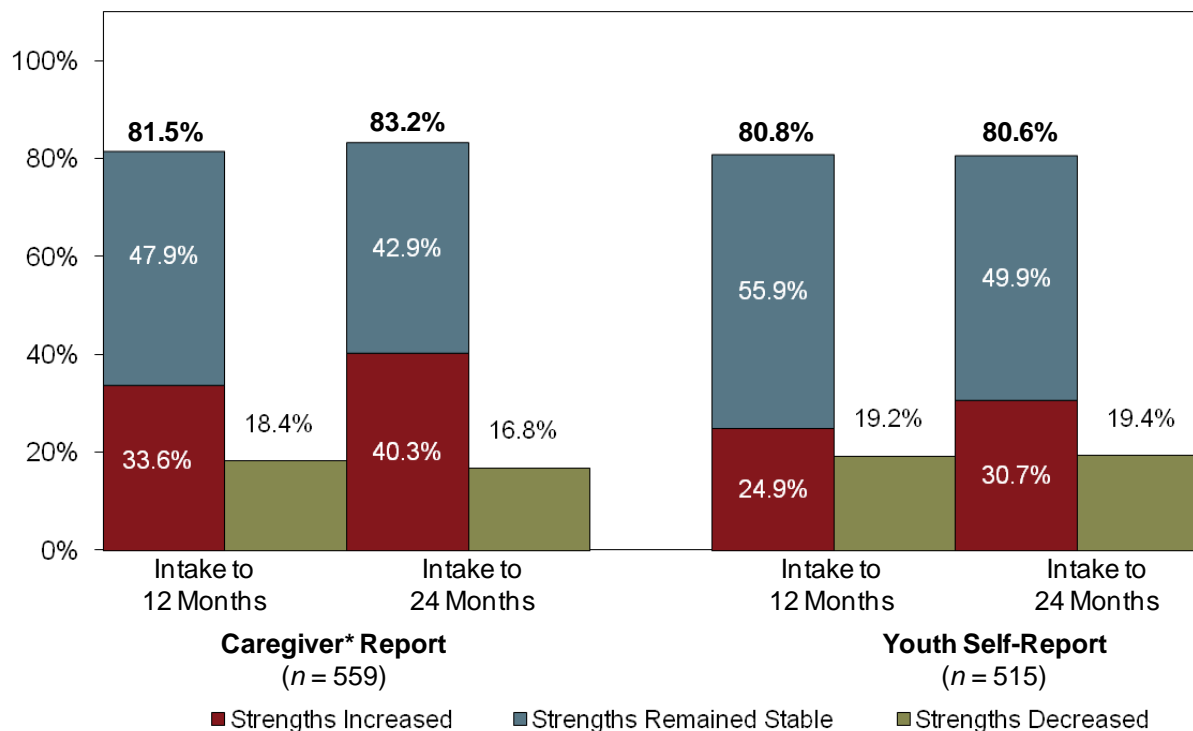
This subsection examines how clinical outcomes for children and youth changed over time. All clinical instruments used to collect the data are described in detail in Appendix D.

### Behavioral and Emotional Strengths

Children's and youths' behavioral and emotional strengths were measured with the Behavioral and Emotional Rating Scale-2 (BERS-2; Epstein, 2004). This scale focuses on strengths and resiliency, identifying behavioral and emotional strengths of children and youth in key areas related to school, family, relationships, and personal competence. Two versions of the BERS-2 were administered: a caregiver report and a youth report.

Figure 2 compares the perspectives of youth and their caregivers. The reports of caregivers of children and youth of all ages were very similar to the reports described here for caregivers of youth 11 and older only.

**Figure 2: Change in Youths' Behavioral and Emotional Global Strengths Score from Intake to 12 Months and Intake to 24 Months, Grant Communities Initially Funded in 2002–2006**



$p < .001$

\*Only caregivers of youth 11 and older.

Based on caregiver reports, approximately one-third (33.6 percent) of youth exhibited improvement in their behavioral and emotional strengths at 12 months, and 40.3 percent of youth exhibited improvement in their strengths at 24 months (see Figure 2).<sup>11</sup> Youths' self-reports about their strengths were lower than their caregivers' reports; 24.9 percent reported increased strengths at 12 months and 30.7 percent reported increased strengths at 24 months. Similarly, a greater percentage of youth than of their caregivers perceived that their behavioral and emotional strengths had decreased between intake and both 12 and 24 months (19.4 percent of youth, between intake and 24 months, compared to 16.8 percent of their caregivers).

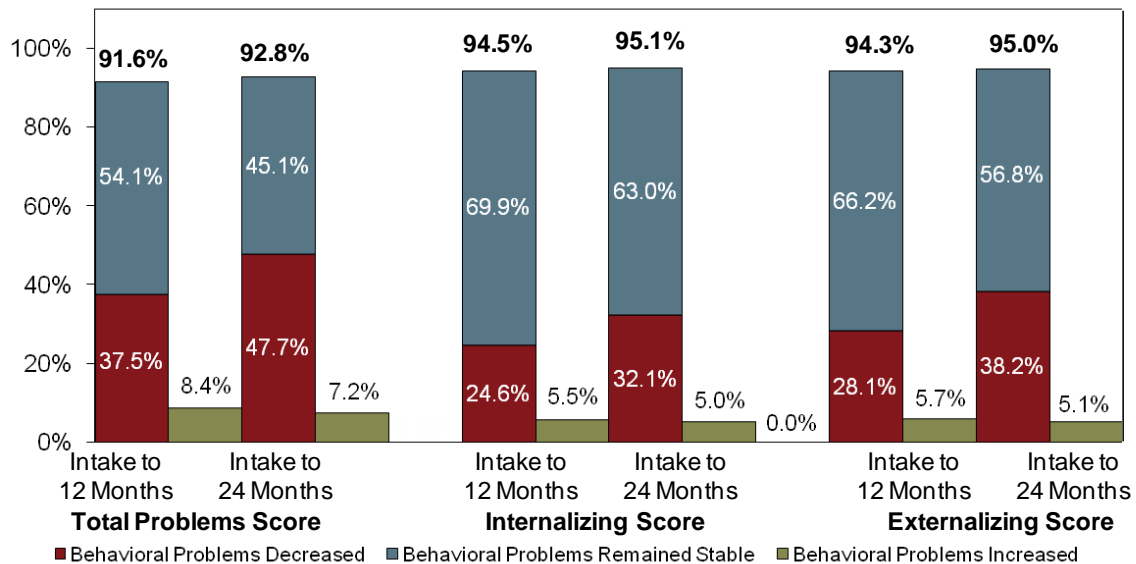
### Behavioral and Emotional Symptoms

The behavioral and emotional symptoms of children and youth aged 6–18 years were examined using the Child Behavior Checklist 6–18 (CBCL 6–18; Achenbach & Rescorla, 2001), which measures behavioral and

emotional problems in children and youth. A Total Problems score were computed, as were scores for two broadband subscales—Internalizing and Externalizing. Internalizing behavioral symptoms include feeling fearful or refusing to talk, whereas externalizing behavioral symptoms include breaking the rules, cruelty, and bullying.

First, changes over time in CBCL 6–18 scores were examined. More than one-third (37.5 percent) of children and youth aged 6–18 years showed a decrease in all types of behavioral symptoms within the first 12 months, according to their caregivers (see Figure 3). Nearly one-half (47.7 percent) showed improvement within the first 24 months. The percentages who reported an increase in behavioral or emotional symptoms as measured by the Total Problems Scale were small in both time periods (8.4 percent from intake to 12 months and 7.2 percent from intake to 24 months). These trends were similar for both the Internalizing and Externalizing subscales.

**Figure 3: Change in the Behavioral and Emotional Symptoms of Children and Youth from Intake to 12 Months and Intake to 24 Months, Grant Communities Initially Funded in 2002–2006**



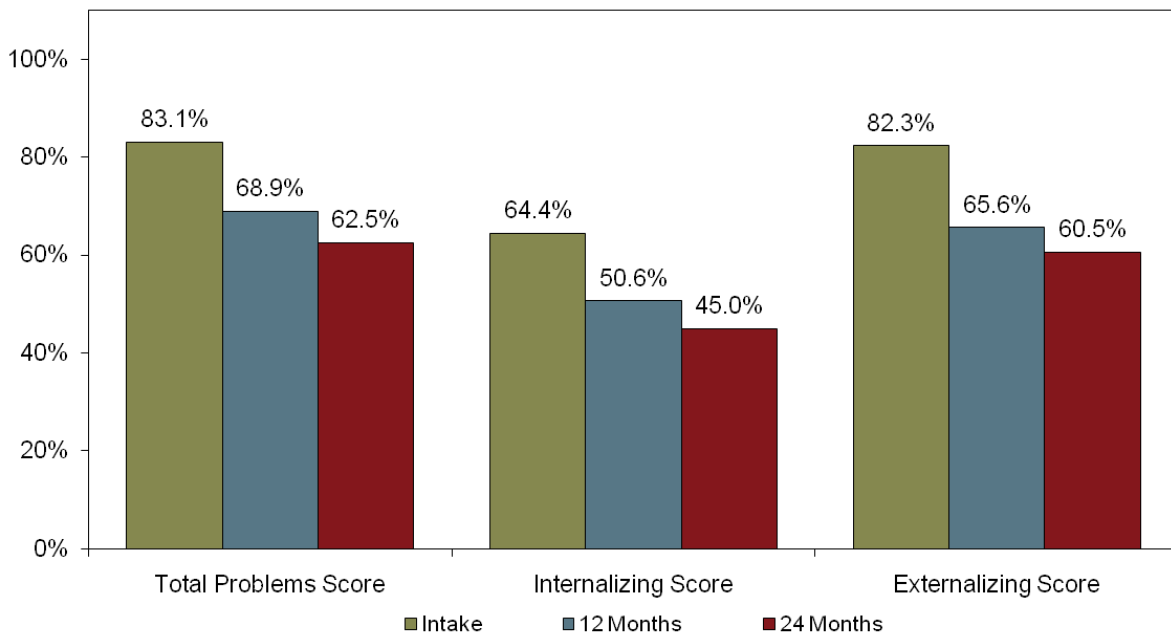
n = 1,029  
p < .001



Second, the percentages with scores above the clinical level for each scale were examined at three points in time. The percentage of children and youth with a CBCL 6–18 Total Problems score in the clinical range was very high at intake (83.1 percent), but declined over time to 68.9 percent at 12 months and 62.5 percent at 24

months (see Figure 4).<sup>12</sup> This pattern was present for the Internalizing and Externalizing subscales, as well. The percentage of children and youth with clinical levels of externalizing behavioral symptoms was higher than that for internalizing behavioral symptoms at each time period.

**Figure 4: Percent of Children and Youth with Clinical Levels of Behavioral and Emotional Symptoms at Intake, 12 Months, and 24 Months, Grant Communities Initially Funded in 2002–2006**



*n* = 1,029  
*p* < .001

### Functional Impairment

The Columbia Impairment Scale (CIS; Bird et al., 1993) provides a global measure of impairment in children and youth aged 3 years and older. It relies on a caregiver’s report to assess basic areas of functioning problems commonly encountered in children and youth, such as relationships with other people, behavioral problems, and negative emotions.

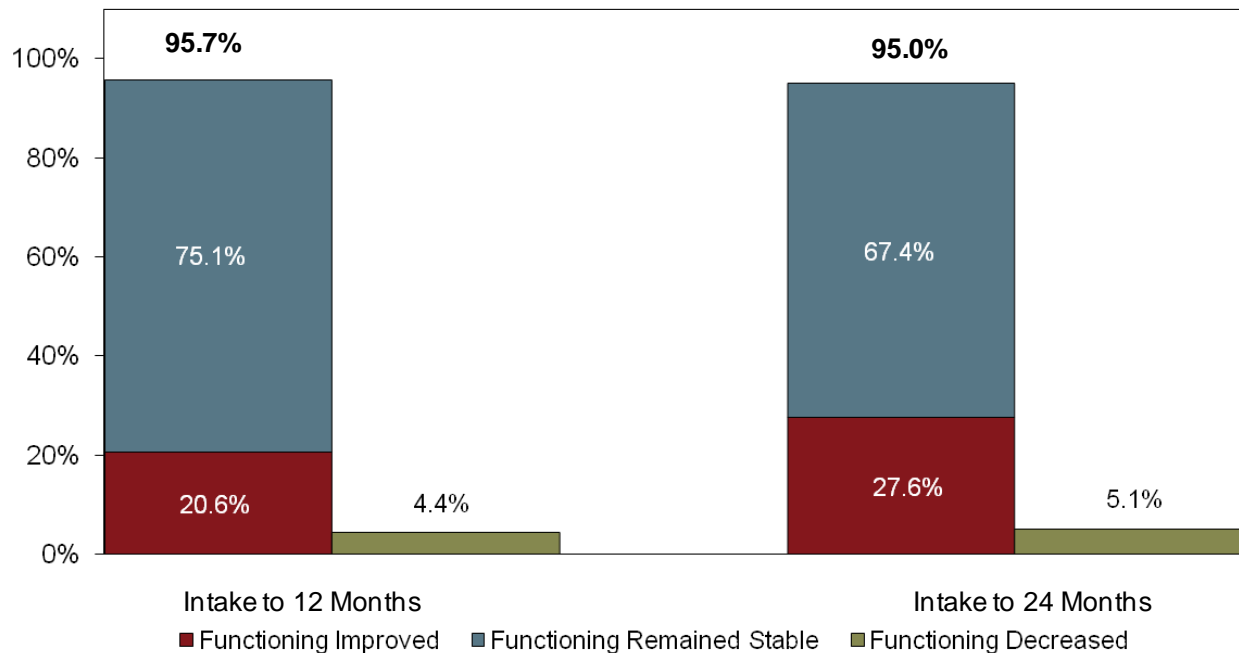
An examination of changes over time revealed that the percentage of children and youth who improved in overall functioning

increased from 20.6 percent between intake and 12 months to 27.6 percent between intake and 24 months (see Figure 5). In addition, the percentage of children and youth with scores above a prescribed clinical level were examined at three points in time, showing a similar pattern. The percentage of children and youth who scored above the clinical level for functional impairment decreased steadily, from 82.0 percent at intake to 70.2 percent at 12 months and 64.2 percent at 24 months.<sup>13</sup>

A small percentage of children and youth (about 5 percent) showed some worsening of impairment from intake to both 12 and 24 months. However, functioning for

approximately 95 percent of children and youth improved or remained stable through the entire period from intake to 24 months.

**Figure 5: Change in Children's and Youths' Functional Impairment from Intake to 12 Months and Intake to 24 Months, Grant Communities Initially Funded in 2002–2006**



*n* = 1,143  
*p* < .001

### Anxiety and Depression Symptoms

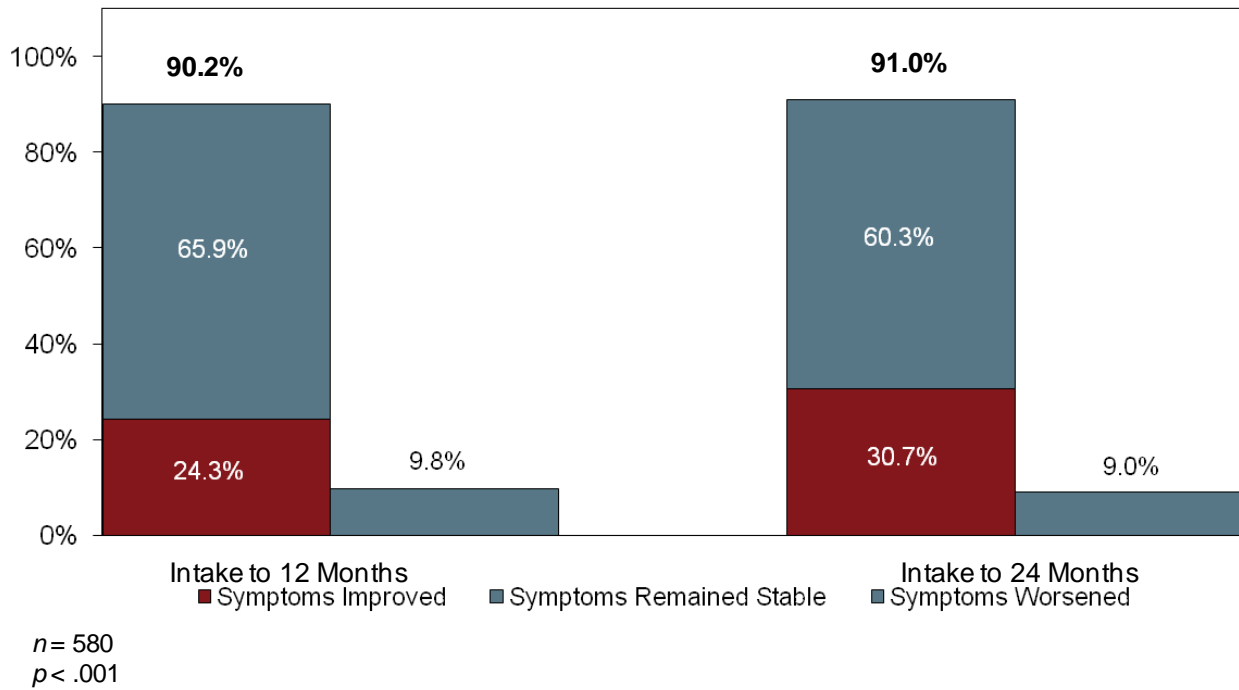
The Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978) is a youth self-report measure of anxiety. Youth also reported on their symptoms of depression using the Reynolds Adolescent Depression Scale, 2nd Edition (RADS-2; Reynolds, 1986).

First, changes over time were examined. Anxiety levels improved or remained stable for about 90 percent of youth from intake to both 12 and 24 months after intake (see Figure 6). Levels improved for 24.3 percent from intake to 12 months, and for 30.7 percent from intake to 24 months. Similarly, the percentage of youth who showed

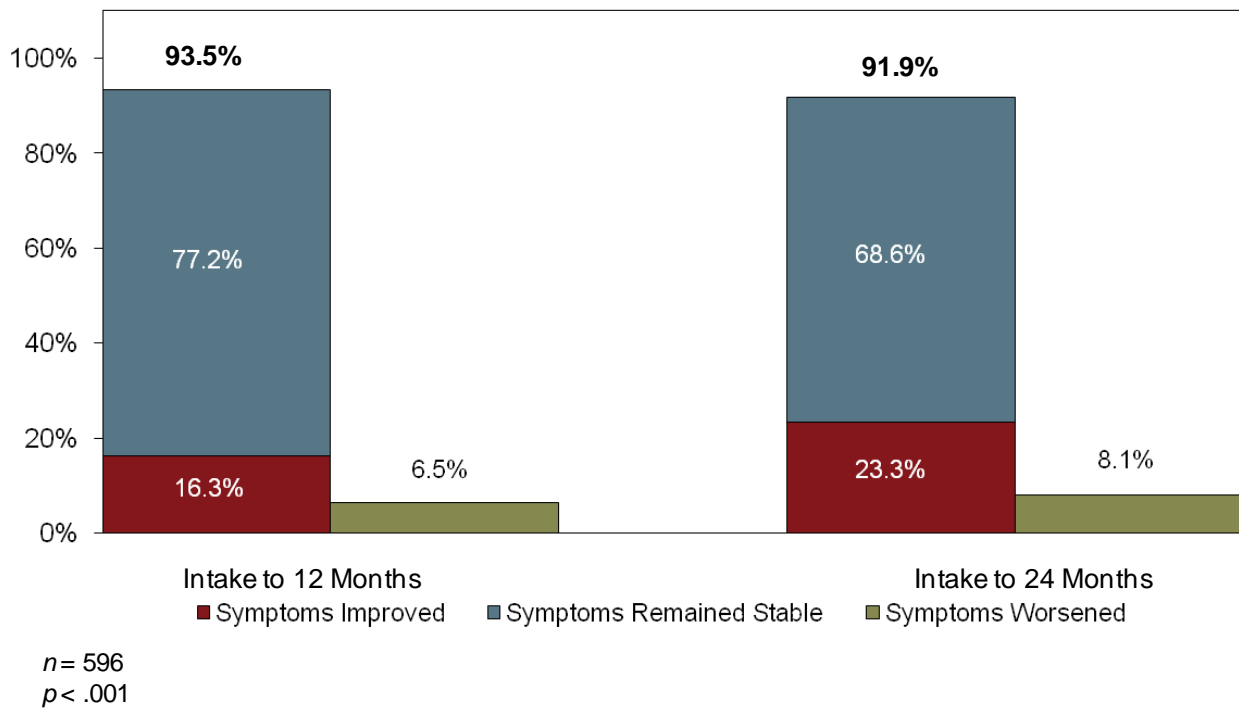
improvement in their self-reported levels of depression increased from 16.3 percent between intake and 12 months to 23.3 percent between intake and 24 months (see Figure 7).

Second, the percentages with scores above the clinical level for each scale were examined at three points in time. The percentages of youth indicating clinical levels of anxiety and depression decreased over time (see Figure 8).<sup>14</sup> For example, the percentage of youth with clinical levels of depression decreased from 23.3 percent at intake to 14.4 percent at 24 months.

**Figure 6: Change in Youths' Anxiety Levels from Intake to 12 Months and Intake to 24 Months, Grant Communities Initially Funded in 2002–2006**



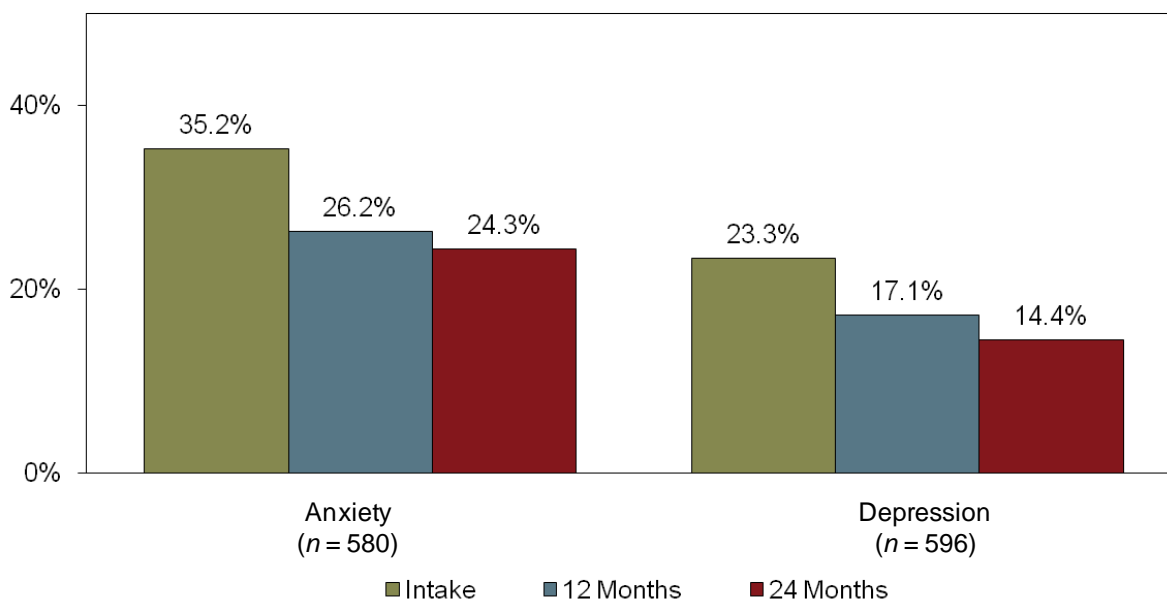
**Figure 7: Change in Youths' Depression Levels from Intake to 12 Months and Intake to 24 Months, Grant Communities Initially Funded in 2002–2006**



However, it should be noted that relatively small percentages of youth indicated such levels of anxiety or depression (35.2 percent and 23.3 percent, respectively, at intake).

Youth with anxiety or depression levels in the clinical range exhibited smaller rates of improvement than youth with levels not in the clinical range.

**Figure 8: Percent of Youth with Clinical Levels of Anxiety or Depression at Intake, 12 Months, and 24 Months, Grant Communities Initially Funded in 2002–2006**



$p < .001$

### **Suicide Ideation and Attempts**

There were 1,261 children and youth who provided information at both intake and 24 months related to suicidal ideation, and 1,301 who provided information at both intake and 24 months related to suicide attempts. The percentage of children and youth who thought about attempting suicide during the 6 months before each interview fell from 29.0 percent at intake to 14.0 percent at 24 months. Similarly, the percentage of children and youth who attempted suicide in the 6 months before each interview fell by more than two-thirds from 9.4 percent at intake to 2.8 percent at 24 months.

### **Clinical Outcomes of Young Children**

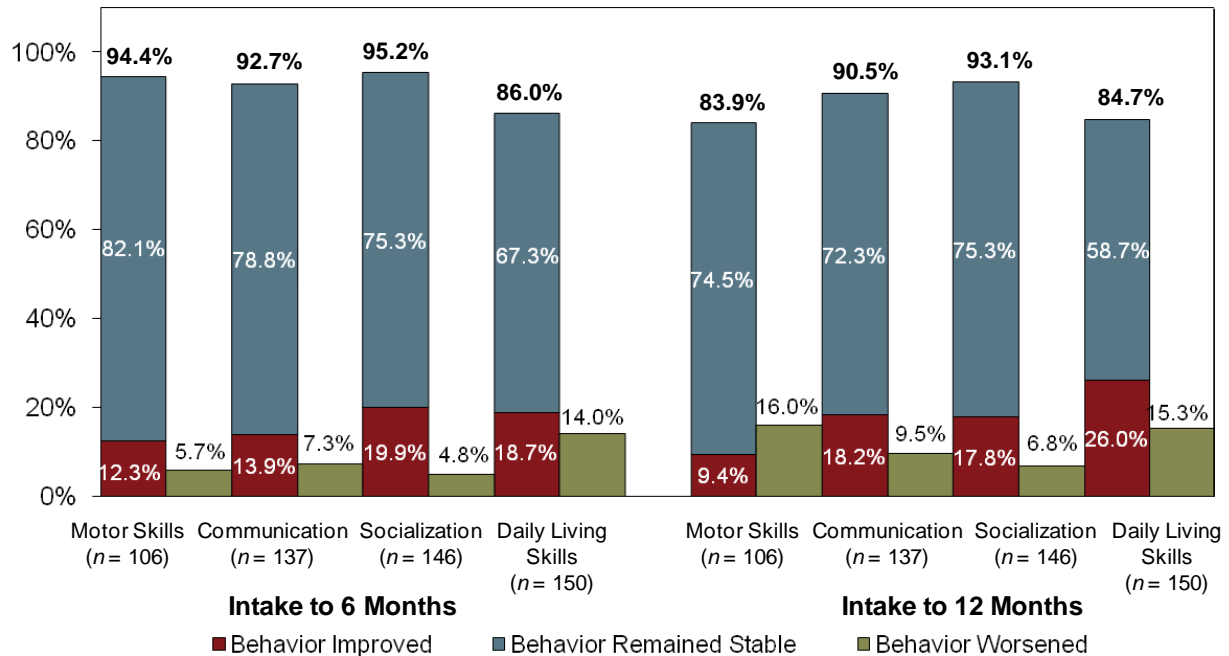
The importance of treating mental health issues in early childhood has been highlighted in the literature over the past

several years. These children exhibited patterns of clinical outcomes that were different from older children and youth.

Because the sample of young children is relatively small, the dataset for analysis contained fewer completed interviews; thus, only 6- and 12-month outcomes were examined for this subsection of the report.

Most children aged birth to 5 years showed improvement or stability from intake to both 6 and 12 months in all four domains of personal and social adaptive behavior measured by the Vineland Screener (Sparrow, Carter, & Cicchetti, 1993), including motor skills, communication, socialization, and daily living skills. Percentages ranged from 83.9 percent to 95.2 percent across all four subscales and both time periods (see Figure 9).

**Figure 9: Change in Young Children's Adaptive Behavior from Intake to 6 Months and Intake to 12 Months, Grant Communities Initially Funded in 2002–2006**



$p < .001$

Behavioral and emotional symptoms of children aged 1½–5 years were measured using the CBCL 1½–5 (Achenbach & Rescorla, 2000). The same Total Problems scale and Internalizing and Externalizing subscales were computed as were computed for the CBCL 6–18. Both changes over time and the percentages with scores above the clinical level were examined. More than one-third (36.9 percent) of children aged 1½–5 years experienced decreased behavioral and emotional symptoms from intake to 12 months. The percentage scoring above the clinical level on the Total Problems scale declined from 66.7 percent at intake to 51.6 percent at 12 months. This compares to 83.1 percent and 68.9 percent, respectively, for children and youth aged 6–18 years.

### Clinical Outcomes of Older Youth

Another group of youth who have received particular attention in the past several years are those who are approaching adulthood

(defined here as aged 14 and older), also called “transition age.” Many of these youth are preparing themselves to live independently, which requires specific training and support.

Both changes over time in the CBCL 6–18 Total Problems score and the percentages with scores above the clinical level were examined. Among these older youth, 52.2 percent had lower CBCL 6–18 Total Problems scores from intake to 24 months, and only 7.3 percent showed deterioration in that time period. The percentage of older youth with a Total Problems score above the clinical level decreased from 82.0 percent at intake to 56.2 percent at 24 months. The percentage of youth aged 14–21 years attempting suicide in the 6 months before each interview decreased from 13.6 percent at intake to 4.1 percent at 24 months.

## Functional Outcomes of Children and Youth

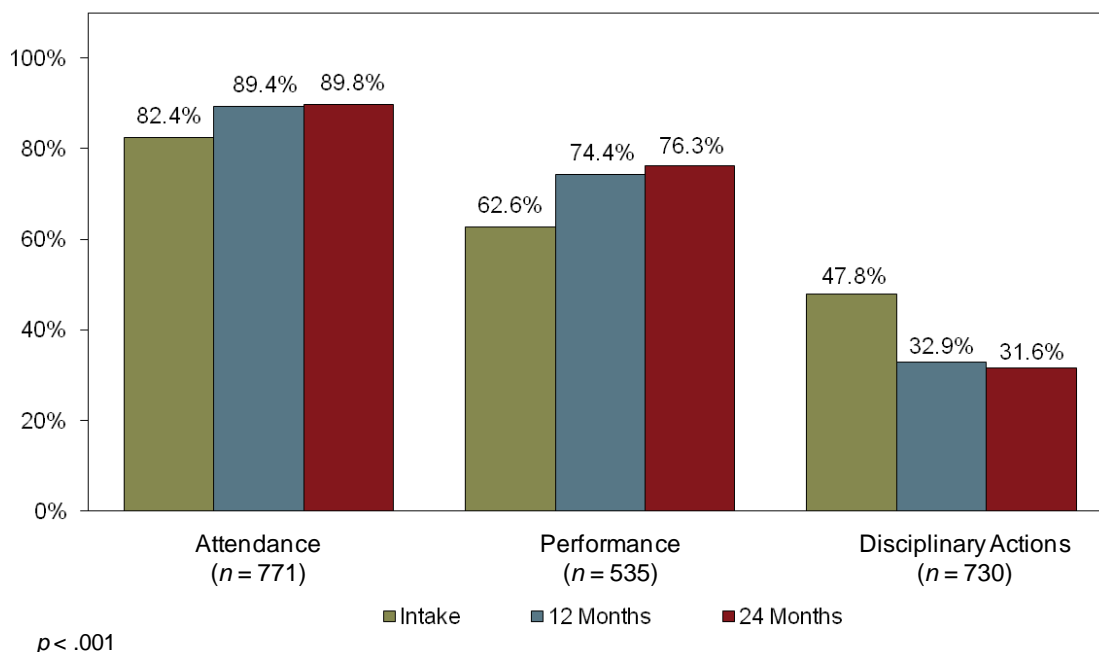
This subsection examines how outcomes measuring home and community functioning, such as school performance and juvenile justice involvement, changed over time.

### Educational Outcomes

Regular school attendance, defined as attending school at least 80 percent of the time, improved. The percentage of children and youth who attended school regularly (out of children and youth who attended school at

all) increased from 82.4 percent of children and youth at intake to 89.8 percent at 24 months (see Figure 10). In addition, the percentage of caregivers who reported that their child missed school at least once a month due to his/her behavioral or emotional problems decreased from 77.2 percent at intake to 63.4 percent at 24 months. Similarly, the percentage of caregivers who reported that their child's attendance in a daycare or afterschool program was affected by his/her behavioral or emotional problems decreased from 36.7 percent at intake to 19.6 percent at 24 months.

**Figure 10: Change in School Attendance, Performance, and Disciplinary Actions at Intake, 12 Months, and 24 Months, Grant Communities Initially Funded in 2002–2006**



Good school performance, defined as achieving an average grade of A, B, or C in the 6 months prior to the interview, also improved. The percentage of children and youth with good school performance increased from 62.6 percent at intake to 76.3 percent at 24 months. The percentage of children and youth involved in school disciplinary actions (being suspended or expelled) in the 6 months prior to each

interview decreased from 47.8 percent at intake to 31.6 percent at 24 months.

Most children and youth attended a public day school. This percentage decreased slightly in favor of “alternative/special day school” over time. About half (51.2 percent) of the children and youth in school had an individualized education plan (IEP), increasing slightly to 59.2 percent at 24 months.



### Educational Outcomes of Older Youth

Among youth aged 14–21 years in school at both intake and the 24-month interview, 76.8 percent attended school regularly at intake. This percentage increased to 88.1 percent at 24 months. The percentages at both time points were somewhat lower than for all children and youth (see above). The percentage with good school performance increased from 58.1 percent at intake to 72.1 percent at 24 months, levels similar to those for all children and youth.

### Stable Living Situations

An important outcome that the system of care approach strives for is to enable children and youth to have stable living situations, particularly in their homes or communities. In each interview, caregivers were asked about all of the places in which the child or youth for which they were responding had lived in the previous 6 months. The percentage of children and youth who were in

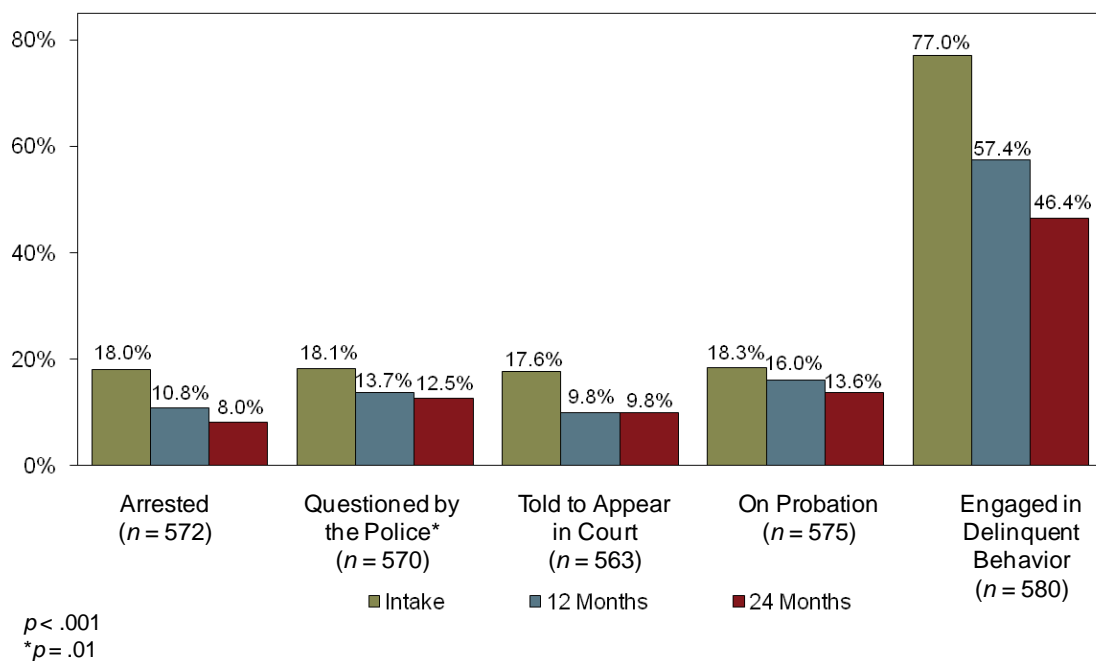
a single living situation rather than in multiple living situations during the previous 6 months increased from 70.9 percent at intake to 81.7 percent at 24 months after intake.

### Criminal Justice Outcomes

Youth in the study were asked about their involvement with law enforcement in the 6 months prior to each interview. The most frequent involvement at intake was being on probation (18.3 percent), followed by being questioned by the police (18.1 percent), being arrested (18.0 percent), and being told to appear in court (17.6 percent).

The frequency of each of these law enforcement activities decreased over time (see Figure 11). In particular, the percentage of youth who reported an arrest dropped from 18.0 percent at intake to 8.0 percent at 24 months, and the percentage of youth who reported any delinquent behavior dropped from 77.0 percent at intake to 46.4 percent at 24 months.

**Figure 11: Change in Youth Criminal Justice Involvement at Intake, 12 Months, and 24 Months, Grant Communities Initially Funded in 2002–2006**



## Physical Health Outcomes

Many children and youth who received services through CMHI-funded community agencies also had chronic physical health problems that required attention and treatment, increasing the complexity of their service needs and affecting their daily lives. Caregivers were asked about several aspects of the physical health and medical treatment of their children.

Almost one-half (44.2 percent) of the children and youth had recurring health problems at intake; this percentage decreased somewhat to 40.4 percent at 24 months. At intake, caregivers reported that the regular activities of 45.9 percent of these children and youth were disrupted due to their health problems. By 24 months after intake, the proportion of caregivers reporting disruptions in their child's activities due to recurring health problems fell by one-fourth, with only 34.7 percent of the caregivers reporting such disruptions.

On average, children and youth had seen a physical health care provider 2.1 times in the 6 months prior to intake. This decreased to an average of 1.5 times in the 6 months prior to the 24-month interview.

## Caregiver and Family Outcomes

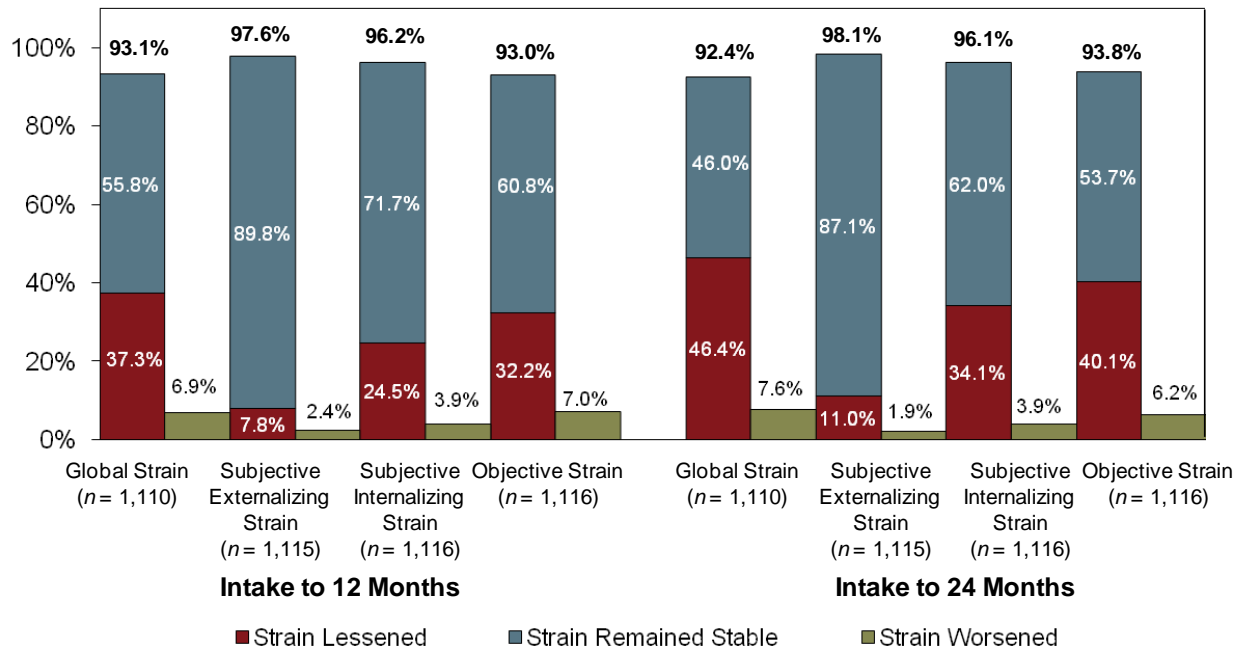
Caregivers and families of children and youth with serious emotional disturbance suffer stress and family dysfunction. This subsection examines how these negative effects improve as the mental health of the child living in the household improves.

## Caregiver Strain

Caring for children and youth receiving services in CMHI-funded systems of care is stressful for both caregivers and siblings. The national evaluation assesses caregiver stress using the Caregiver Strain Questionnaire (CGSQ; Brannan, Heflinger, & Bickman, 1998). It is comprised of three related dimensions of caregiver strain: subjective externalizing strain (e.g., feeling anger or resentment towards one's child), subjective internalizing strain (e.g., feeling worry or guilt), and objective strain (e.g., observable disruptions in family life such as lost work time).

More than one-third (37.3 percent) of caregivers reported decreased global strain from intake to 12 months, and nearly one-half (46.4 percent) reported decreased global strain from intake to 24 months (see Figure 12). The aspect of strain improving the most was objective strain, which improved from 32.2 percent of caregivers reporting lessened strain between intake and 12 months to 40.1 percent of caregivers reporting lessened strain between intake and 24 months. In contrast, subjective internalizing strain increased from 24.5 percent of caregivers reporting lessened strain between intake and 12 months to 34.1 percent of caregivers reporting lessened strain between intake and 24 months (an increase of 9.6 percent).

**Figure 12: Change in Caregiver Strain from Intake to 12 Months and Intake to 24 Months, Grant Communities Initially Funded in 2002–2006**



$p < .001$

Approximately 90 percent of caregivers reported levels of family functioning (e.g., communication among family members, time spent together, ability to deal with conflict) that improved or remained stable from intake to 24 months. The percentage of caregivers who reported improved family functioning increased from 12.6 percent (from intake to 12 months) to 14.9 percent (from intake to 24 months). However, the percentage of caregivers who reported deteriorated family functioning also increased modestly, from 9.9 percent (from intake to 12 months) to 11.9 percent (from intake to 24 months). Thus, although most caregivers reported that their levels of strain improved or remained the same in the 24 months after intake, a subset of caregivers reported that their levels of strain worsened.

### Caregiver Employment

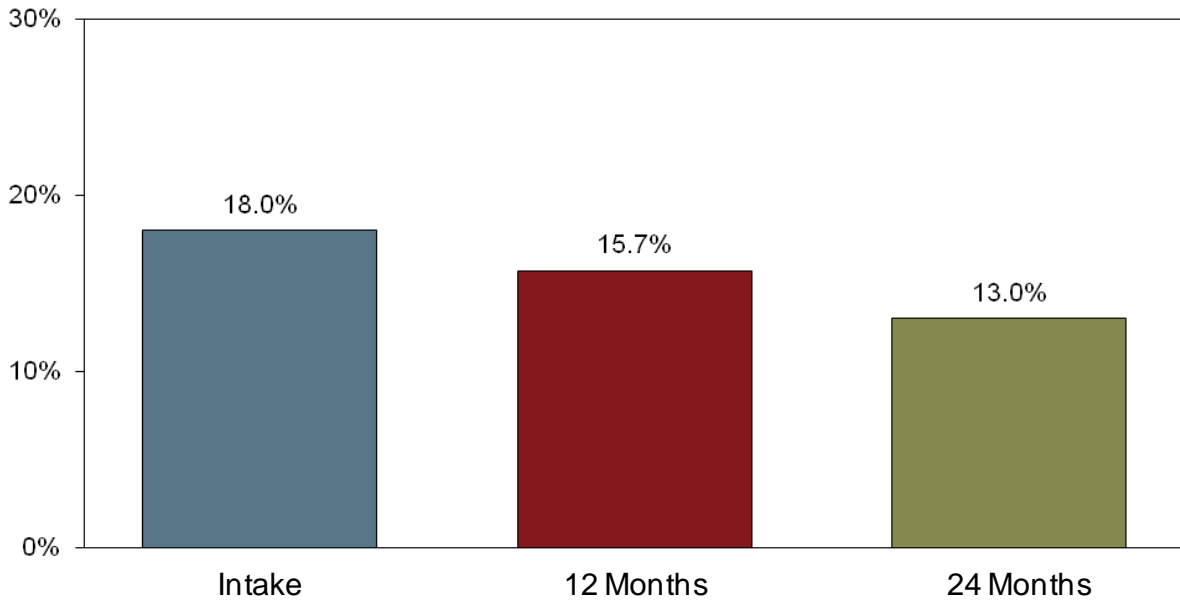
An important goal of the system of care approach is to improve the lives of families of children and youth with serious emotional

issues. Decreased caregiver unemployment is one measure of improvement in family life.

At intake, 18.0 percent of caregivers reported that they were unemployed but thought they would be employed if their child did not have behavioral problems (see Figure 13). This percentage decreased to 15.7 percent at 12 months after intake and 13.0 percent at 24 months.

For caregivers who were employed at intake, the number of missed days of work due to their child's problems in the previous 6 months decreased from 6.9 days at intake to 3.1 days at 24 months.

**Figure 13: Change in Caregivers' Unemployment Rate Due to Child's Behavioral Problems at Intake, 12 Months, and 24 Months, Grant Communities Initially Funded in 2002–2006**



$n = 1,069$   
 $p < .001$

### Summary

- Children and youth showed improvements in clinical outcomes, including greater behavioral and emotional strengths (evident from both caregiver and youth reports), decreased symptoms of depression and anxiety, improvement in children's and youths' behavioral and emotional problems and overall functioning, and improved adaptive behavior of young children.
- Children and youth showed improvements in home and community functioning as well, such as better educational outcomes (both attendance and grades), more stable living situations, decreased involvement with the legal system, and less disruption of regular activities due to recurring health problems.
- Caregivers reported decreased levels of strain associated with caring for their children and improved employment situations, including fewer days of missed work.

## Experience With System of Care Services

### Amounts and Types of Services Received

Children and youth received a wide array of mental health services, including assessment and evaluation services; medication monitoring; case management services; caregiver or family support; and individual, group, and family therapy. During each of the 6-month interviews after entry into the program, caregivers were asked about the types of services they had received during the previous 6 months. This section summarizes services reported by caregivers as being received between intake and 12 months after intake, as well as services reported being received between 12 and 24 months after intake.<sup>15</sup>

The most frequently used types of services between intake and the 12-month interview were case management, individual therapy, and assessment or evaluation. Each of these three service types was received by more than 80 percent of children and youth (see Table 6). Case management and individual therapy remained the most frequently used types of services between the 12-month and 24-month interviews. Assessment or evaluation was replaced by medication treatment monitoring as the third most frequently received treatment. This decrease in assessment or evaluation might be expected, as these activities tend to occur at intake.

**Table 6: Types of Services Received by Children and Youth and Their Families**

Type of Service	Received Service Between:	
	Intake and 12-Month Interviews %	12-Month and 24-Month Interviews %
Case management ( <i>n</i> = 555)**	87.2	75.1
Individual therapy ( <i>n</i> = 559)**	86.8	81.6
Assessment or evaluation ( <i>n</i> = 540)**	80.2	63.5
Medication treatment monitoring ( <i>n</i> = 558)	68.3	63.8
Informal supports ( <i>n</i> = 551)	58.4	52.1
Family therapy ( <i>n</i> = 554)**	53.2	40.6
Caregiver or family support ( <i>n</i> = 541)**	51.0	37.3
Recreational activities ( <i>n</i> = 552)*	48.0	40.6
Transportation ( <i>n</i> = 555)**	41.3	31.5
Flexible funds ( <i>n</i> = 551)**	39.6	25.8
Group therapy ( <i>n</i> = 553)*	38.3	32.2
Afterschool programs or child care ( <i>n</i> = 556)*	27.2	19.4
Crisis stabilization ( <i>n</i> = 554)**	26.9	16.4
Respite care ( <i>n</i> = 549)	24.2	21.3
Behavioral/therapeutic aide ( <i>n</i> = 550)**	23.8	15.6
Family preservation ( <i>n</i> = 551)*	19.8	14.3
Inpatient hospitalization ( <i>n</i> = 555)**	18.4	10.5

**Table 6: Types of Services Received by Children and Youth and Their Families (continued)**

Type of Service	Received Service Between:	
	Intake and 12-Month Interviews %	12-Month and 24-Month Interviews %
Day treatment ( <i>n</i> = 556)	12.2	10.4
Residential treatment center ( <i>n</i> = 552)	10.1	9.6
Vocational training ( <i>n</i> = 545)	7.3	8.1
Residential therapeutic camp or wilderness program ( <i>n</i> = 553)	6.9	4.0
Youth transition ( <i>n</i> = 543)	4.4	5.5
Therapeutic group home ( <i>n</i> = 552)	3.4	2.7
Independent living ( <i>n</i> = 543)	3.3	3.9
Therapeutic foster care ( <i>n</i> = 550)	1.5	3.1

\* Decrease is significant at  $p < .01$  level.

\*\* Decrease is significant at  $p < .001$  level.

The number of different types of services received tended to decrease over time. The average total number of different types of services used decreased from 8.4 between intake and the 12-month interview to 6.9 between the 12-month and 24-month interviews. Most types of service were also used less frequently over time (see Table 6). Even more notably, the percentage of children and youth receiving a large number of different types of services (i.e., seven or more) decreased from 70.5 percent between intake and the 12-month interview to 50.6 percent between the 12-month and 24-month interviews.

There may be several factors contributing to this decrease in use of services. The most likely possibility is connected to the improvement that children and youth experienced in their behavior, emotional stability, and functioning, which resulted in their need for fewer types of services.

One of the major goals for the CMHI is to decrease the amount of out-of-home services used. The percentage of children and youth receiving inpatient hospitalization, residential therapeutic camp, or residential treatment decreased from 35.4 percent between intake

and the 12-month interview to 24.1 percent between the 12-month and 24-month interviews.

## Cultural Competence of Service Experience

The system of care philosophy includes providing services that are culturally and linguistically competent.<sup>16</sup> Caregivers indicated consistently across the 24-month time period summarized in this report that including their cultural traditions, beliefs, and practices into service planning and provision was very or extremely important to them, on average.<sup>17</sup> High proportions of caregivers also reported consistently that most or all of the time, providers understood their beliefs, culture, and needs; treated them and their cultural beliefs with respect; and were willing to incorporate the family's religious/spiritual beliefs into their child's treatment.<sup>18</sup> In addition, caregivers stated that their child's treatment provider spoke their language, or that interpreters were readily available most or all of the time.



## Satisfaction of Caregivers and Youth with Services

Measuring the satisfaction of caregivers is one way of accomplishing the authorizing legislation’s mandate to have parents assess the effectiveness of systems of care. As part of the Service Experience Study, caregivers and youth (aged 11 years and older) were asked about their general level of satisfaction with the services they received in the CMHI-funded communities, and about several specific aspects of that service experience: the quality of the services received, participation in their own care decisions, care outcomes, and the cultural sensitivity of their providers. In general, caregivers and youth reported being satisfied with the services they received, consistently across all four 6-month follow-up interviews.

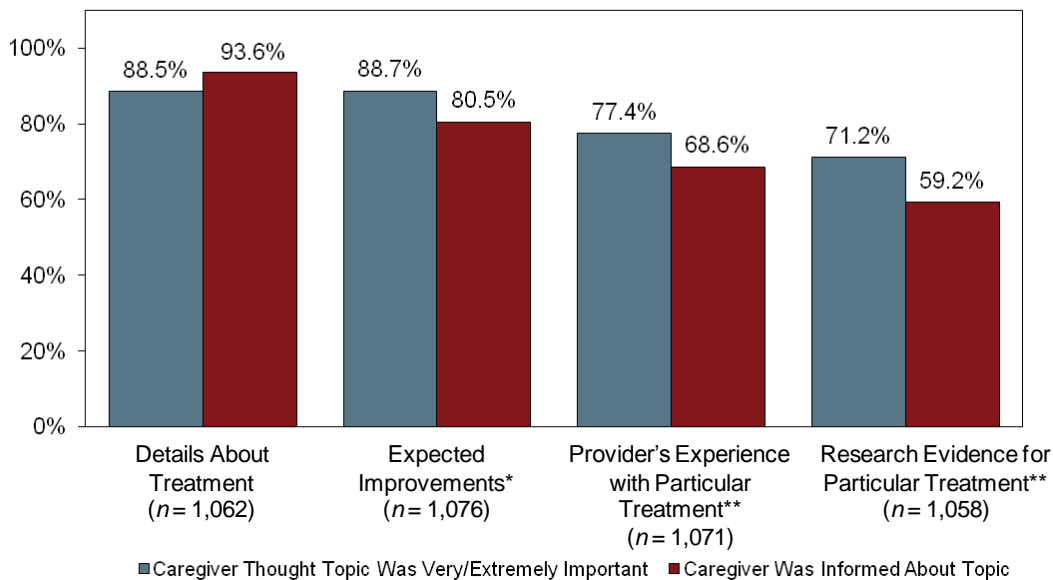
Caregivers’ overall satisfaction with services received an average rating of 4.1. The average ratings for the various aspects of services ranged from 3.6 (regarding service outcomes) to 4.5 (regarding the cultural sensitivity of service provision).

Interestingly, youth rated their satisfaction with the quality of their services (4.0) and their participation in their own care decisions (3.7) lower than caregivers did (4.1 and 4.2, respectively), and rated their satisfaction with their care outcomes (3.9) higher than caregivers did (3.6).

## Caregiver Interest in Information About Services

Caregivers were asked a series of questions about whether they believed it was important to have several aspects of the treatment or services being provided to their child explained to them, including (1) details about the treatment, (2) expected improvements resulting from the treatment, (3) the provider’s experience using the treatment with similar children, and (4) the research evidence supporting the effectiveness of the treatment (see Appendix C for a description of the Evidence-Based Practice Experiences Substudy of the Evidence-Based Practices Study). The findings presented here are based on approximately 1,000 responses to the 6-

**Figure 14: Information Provided to Caregivers about Their Child’s Treatment, Grant Communities Initially Funded in 2005–2006**



\* $p < .05$   
 \*\* $p < .001$

month Longitudinal Outcome Study interview from communities funded in 2005–2006.

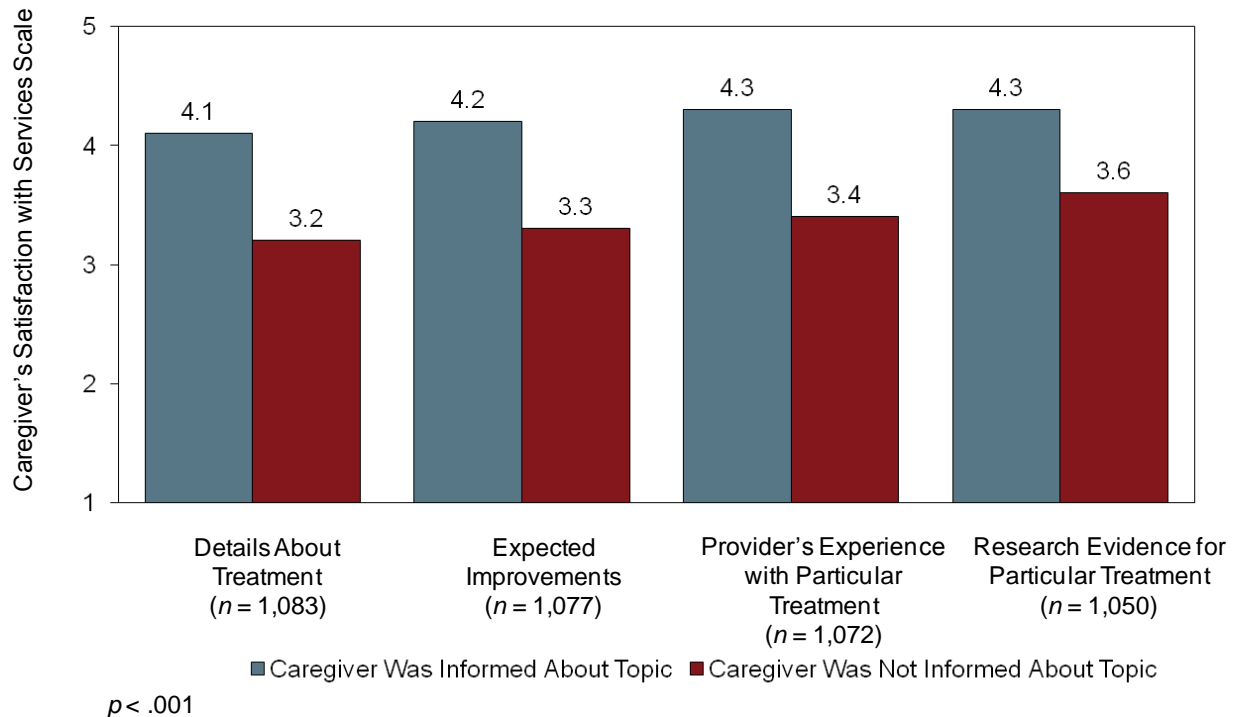
Most (at least 71.2 percent) caregivers expressed that it was very or extremely important to be told about all of these aspects of the treatment their child was receiving in the first 6 months of treatment (see Figure 14). Responses indicated substantial discrepancies between the information desired by caregivers and reportedly given by service providers. The white bars in Figure 14, representing the percentages of caregivers who thought each topic was very or extremely important, are almost uniformly higher than the black bars, representing the percentages of caregivers who perceived they had been given information on each topic by providers. On the one hand, 88.5 percent of the caregivers thought that learning about the details of their child’s treatment before receiving the treatment was important and almost the same percent (93.6 percent) reported that their providers had explained those details. On the other hand, about three-quarters of the caregivers thought it was important to learn about the provider’s experience with the particular treatment being offered and the research evidence, yet only about two-thirds of the caregivers

reported that they had been given this information by their service providers.

### **Caregiver Service Satisfaction and Increased Knowledge About Services**

Caregivers’ satisfaction with services was related to whether or not they were informed about the services being provided to their children and the evidence supporting those services (see Figure 15). For all four topics examined in this study, caregivers receiving information about the topic were more satisfied with the services provided than caregivers not receiving information about the topic. Caregivers were similarly more satisfied with the outcomes of services (although these results are not shown in Figure 15). These findings suggest that service providers should be encouraged to share with caregivers research on evidence supporting treatment effectiveness, as well as other information about the treatment being provided, as a strategy for improving caregiver satisfaction with services. This finding is particularly important within the context of family-driven care, which requires that caregivers be informed about the services they are choosing for their children.

**Figure 15: Relationship Between Information Provided about Treatment and Caregiver Satisfaction with Services, Grant Communities Initially Funded in 2005–2006**



### Summary

- The most commonly used services were assessment and evaluation, medication monitoring, individual therapy, and case management services. The least commonly used services were therapeutic foster care or group home, residential therapeutic camp or wilderness program, and vocational training.
- The number of different types of services received decreased over children's and youths' first 2 years of service use.
- The percentage of children and youth receiving inpatient hospitalization, residential therapeutic camp, or residential treatment decreased between intake and the 12-month interview, and between the 12-month and 24-month interviews.
- Caregivers and youth found their service providers to be culturally competent, and were very satisfied with the cultural sensitivity of their care.
- Caregivers were very satisfied with the services received by their children.
- The more informed caregivers were about the treatment their child was receiving, the more satisfied they tended to be with the services received.

## Service Costs in the CMHI

One of the intended benefits of the system of care philosophy is that the delivery of appropriate and coordinated mental health care will result in the most cost efficient and economically beneficial method of service delivery. The national evaluation examines the types of services used by children and youth and their families, utilization patterns, and associated costs (see Appendix C for a description of the Services and Costs Study).

### Cost Savings from Reduction in Inpatient Care

Some of the children and youth being served received inpatient hospitalization. The average number of days spent in inpatient hospital care decreased from 2.02 days in the 6 months prior to intake to 0.87 days in the 6 months prior to the 24-month interview. This decrease is consistent with the findings presented in the previous section that the percentage of children and youth in any type of inpatient care decreased over the first 2 years after intake.

The averages are based on data for all 1,497 children and youth whose caregivers provided information, during their intake and 24-month interviews, about whether their children received any inpatient hospitalization and for how many days. The number of days was assumed to be zero for children and youth whose caregivers indicated that they were not hospitalized at all during the particular 6-month period.

The average charge per day for inpatient hospital care for patients between 1 and 18 years old with a primary diagnosis of a mental health disease or disorder is \$2,067, according to the estimate provided by the Healthcare Cost and Utilization Project's 2007 Nationwide Inpatient Sample (NIS) of the Agency for Healthcare Research and

Quality (Agency for Healthcare Research and Quality, 2007). Thus, the total cost of an average child's or youth's care in the 6 months prior to entering the CMHI was approximately \$4,175, whereas the cost between 18 and 24 months of an average child's or youth's care was approximately \$1,798. This means that \$2,377 less per child or youth, on average, was spent on inpatient hospital care (see Figure 16).

The estimated number of children and youth being served in CMHI communities in FY 2009 was 10,762. The decrease in the average number of inpatient hospitalization days for the 1,497 children and youth with that information is used as an estimate for the decrease in the average number of inpatient hospitalization days experienced by all 10,762 children and youth served in grant communities in FY 2009. This translates into an estimated maximum gross cost savings due to decreases in use of inpatient hospitalization over a 24-month period of more than \$25 million (\$25,581,274).

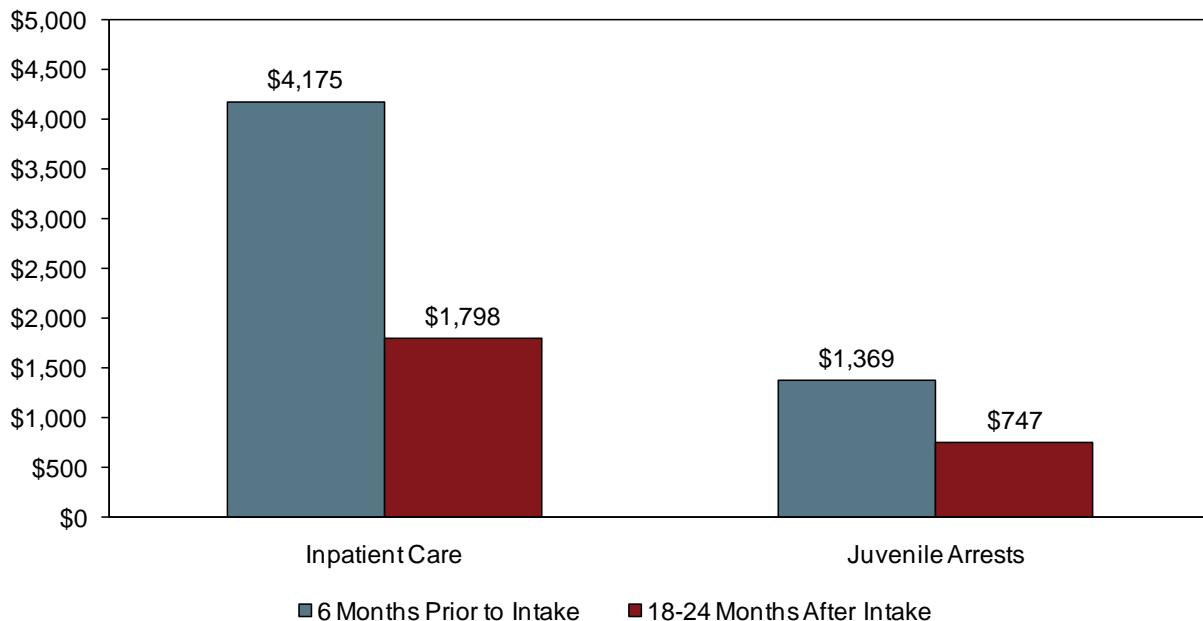
### Cost Savings from Reduction in Juvenile Arrests

Some of the youth being served were arrested either in the 6 months prior to intake or in the 6 months prior to their 24-month interview. The average number of arrests decreased from 0.33 in the 6 months prior to intake to 0.18 in the 6 months prior to the 24-month interview. This decrease is consistent with the findings presented previously that the percentage of youth reporting an arrest decreased over the first 2 years after intake. These averages are based on data collected from 860 youth who provided information, during their intake and 24-month interviews, related to their arrest histories, including reports of zero arrests.

The average cost per juvenile arrest is \$4,149, according to 2000 data from the Bureau of Justice Statistics (National Center on Addiction and Substance Abuse, 2004). Thus, the cost for an average youth (not just those reporting juvenile justice data) due to arrest in the 6 months prior to entering the CMHI was approximately \$1,369, whereas the cost between 18 and 24 months for an average youth due to arrests was approximately \$747. This means that \$622 less per youth, on average, was spent on arrests (see Figure 16).

The estimated number of all youth served in CMHI-funded systems of care in FY 2009 was 6,715. The decrease in the average number of arrests for the 860 youths reporting arrest information is used as an estimate for the decrease in the average number of arrests experienced by all 6,715 youth served in grant communities in FY 2009. This translates into an estimated maximum gross cost savings over a 24-month period of more than \$4 million (\$4,176,730).

**Figure 16: Per-Person Cost Savings from Reductions in Inpatient Hospitalization and Juvenile Arrests**



### A Detailed Look at Services and Costs: A Case Study

In 2004, the Kentucky Department of Mental Health and Mental Retardation Services (DMHMRS) received a CMHI grant to implement the Kentuckians Encouraging Youth to Succeed (KEYS) project in an eight-county region of central, northern Kentucky. KEYS is primarily built around school-based interventions, placing Family Support Teams consisting of a mental health

therapist, service coordinator, and family liaison into school buildings in four different school districts across the region. Each of the selected schools is implementing the Positive Behavioral Interventions and Supports Model, creating an environment that is supportive of positive, therapeutic approaches to preventing problem behaviors and addressing behaviors of children and youth with emotional disturbances.

KEYS has been successful in collecting detailed services and cost information from multiple agencies in the community. This case study presents preliminary information on services received by families served by KEYS and costs associated with these services. The data cover a period from October 2005 to March 2009 and include 8,471 distinct service events for 144 children and youth. The total cost for outpatient and

inpatient mental health services, and child welfare placement services, over the observed period of 3.5 years was \$1.1 million. This translates into a cost per child or youth of \$7,728. The data include information from the mental health agency, the child welfare agency, and schools.<sup>19</sup> Table 7 summarizes the distribution of charges across service categories.

**Table 7: Distribution of Charges and Service Events Across Service Categories in Kentucky System of Care**

Service Category	Dollars Charged	Percent of Total Charges %	Percent of Total Service Events*
<b>Outpatient Services</b>			
Case Management	\$216,837.00	19.5	44.9
Individual Therapy	\$198,004.30	17.8	21.9
Family Therapy	\$80,089.70	7.2	6.4
Educational Services	\$77,819.63	7.0	10.1
Medication Treatment/Monitoring	\$30,085.20	2.7	2.3
Group Therapy	\$13,526.40	1.2	4.1
Intake/Evaluation	\$12,826.23	1.2	2.4
Day Treatment	\$4,398.00	0.4	1.3
Crisis Intervention	\$2,851.64	0.3	0.6
Family/Caregiver Support	\$1,440.46	0.1	3.5
Self-Help Group	\$1,408.67	0.1	1.6
Advocacy	\$310.41	0.0	0.5
Other	\$363.81	0.0	0.2
Inpatient Hospitalization	\$160,000.00	14.4	0.2
Child Welfare Placements	\$312,840.00	28.1	0.1
<b>Total</b>	<b>\$1,112,801.45</b>	<b>100.0</b>	<b>100.0</b>

*n* = 8,471 distinct service events for 144 children and youth.

Among outpatient services, case management and individual therapy were the service categories with the highest expenditures (19.5 percent and 17.8 percent, respectively, of the total KEYS expenditures). Outpatient services as a whole accounted for 57.5 percent of the total charges and 99.7 percent of all service encounters. Whereas less than 1 percent of all service events were inpatient hospitalizations or child welfare placements, these events accounted for 14.4 percent of all charges, and child welfare placements

accounted for 28.1 percent of the total charges.

Figure 17 presents the distribution of payers for the services provided. Out of the approximately \$1 million total cost of services stated above, more than half (59.3 percent) of the dollars spent were charged to Medicaid, followed by 28.2 percent charged to other public providers (mostly child welfare charges for foster care placements). The 11.4 percent of charges paid by private

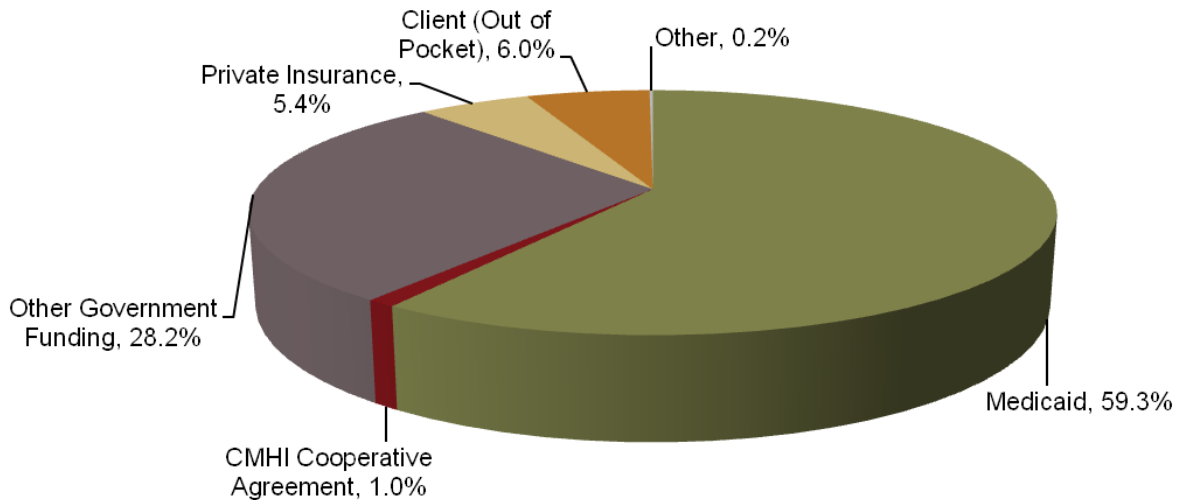


insurance and clients were for the provision of individual and family therapy.

The fact that public funding was used to finance the majority of services is consistent

with the fact that almost 60 percent of the families served by KEYS live below the poverty level, and almost 15 percent live at or near the poverty level.<sup>20</sup>

**Figure 17: Distribution of Charges Across Payers in KEYS**



KEYS services were provided in various locations. Almost three-fourths (72.0 percent) of services were provided in schools, 9.0 percent in community mental health centers, 6.8 percent in hospitals, 6.4 percent in other community locations, and 5.1 percent in providers' offices or clinics. Other service locations included the child's or youth's home, mobile units, and nonresidential substance abuse treatment centers.<sup>21</sup>

Case managers and care coordinators provided 45.0 percent of all services. More than one-third of all services were provided by counselors, 7.7 percent by family members, 7.5 percent by psychologists, and 3.0 percent by psychiatrists. Other providers included social workers, foster parents, and other mental health staff. One-half of all children, youth, and families had three or more different types of service providers.

The KEYS example illustrates the use of resources to support children and youth and their families through outpatient services in

their communities with the support of case management. Most services were paid for by sources other than the grant, as intended by the CMHI, and less than 6 percent of the charges were paid by the client. To meet the diverse needs of youth and families, the services were provided in a variety of locations and by a variety of provider types, including family members. KEYS's access to detailed data on services and costs across child-serving systems provides information that the community can use to identify significant expenditures.

### Summary

- Substantial maximum gross savings are estimated due to decreased inpatient hospital care and decreased arrests among children and youth served in grant communities.
- Detailed data about service events, including their costs, can be used by grant communities to help plan services and demonstrate the advantages of the system of care approach.

## System-Level Assessment of the CMHI

The national evaluation includes four studies that examined various aspects of how community systems changed as their CMHI cooperative agreements were implemented. This section describes findings from these studies.

The System of Care Assessment examined the degree to which system of care principles were incorporated into the communities' infrastructure and service provision. The Sustainability Study examined how the grant communities prepared to sustain system of care infrastructure development and services after the termination of funding. Two special studies included subsets of communities, examining to what degree service providers understood and adhered to empirically based best practices (the Evidence-Based Practices Study) and how primary care physicians interacted with systems of care to improve mental health care for children, youth, and families (the Primary Care Provider Study). Findings from the four national evaluation studies described here also provide insight into challenges faced by communities in attempting to transform the mental health services provided to children and youth and their families.

### CMHI Grant Communities' Implementation of System of Care Principles

The national evaluation includes an assessment that examines the degree to which system of care principles have been incorporated into the communities' infrastructure development and service provision. The infrastructure domain is comprised of four components that address governance, management and operations, service array, and evaluation and quality monitoring. The service delivery domain is comprised of four components that address

entry into services, service planning, service provision, and case review.

The assessment determines the degree to which each of these domains incorporates the eight system of care principles, that services should be (a) family driven; (b) individualized, youth guided, and strengths based; (c) culturally and linguistically competent; (d) provided in the least restrictive environment possible; (e) community based; (f) accessible; and (g) provided through a collaborative and coordinated network involving (h) interagency cooperation and service integration. Detailed descriptions of each of these domain components can be found in Appendix C.

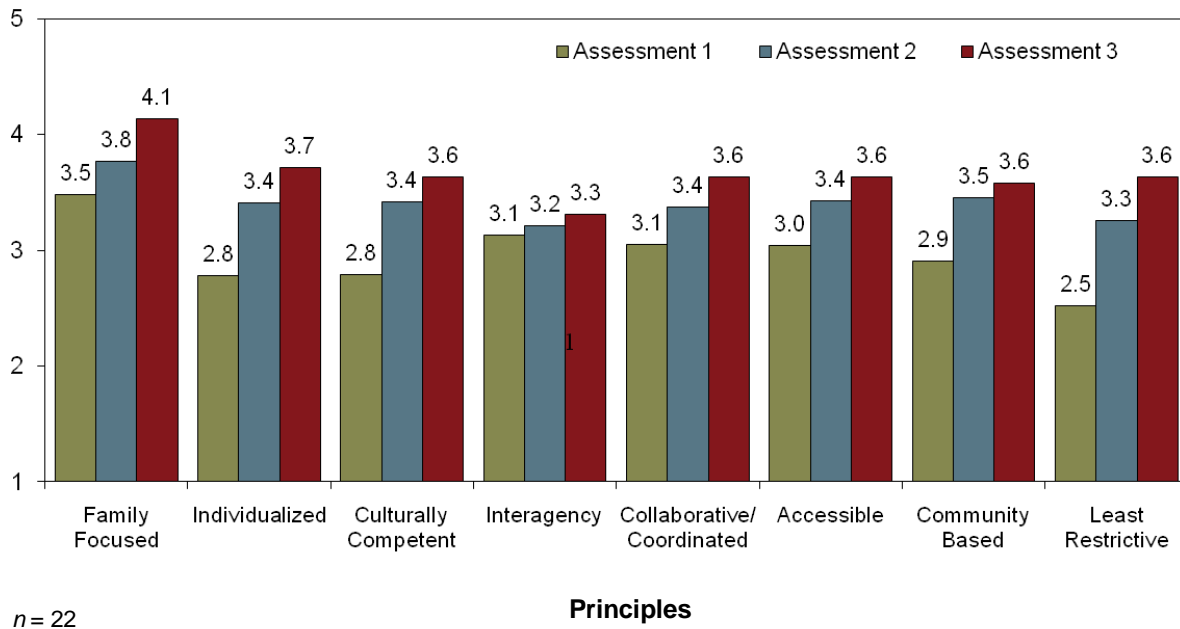
The information is gathered through document review and semistructured interviews conducted during site visits to all grant communities (see Appendix C for a complete description of this study). Ratings by site reviewers on a scale of 1 to 5 (5 being highest) describe the degree of implementation of these principles at the beginning, middle, and end of each grant.

Phase IV grant communities initially funded in 2002–2003<sup>22</sup> had participated in all three assessment site visits, whereas Phase V grant communities had only participated in the first round of site visits. For this reason, the findings are presented separately for the two groups of grant communities.

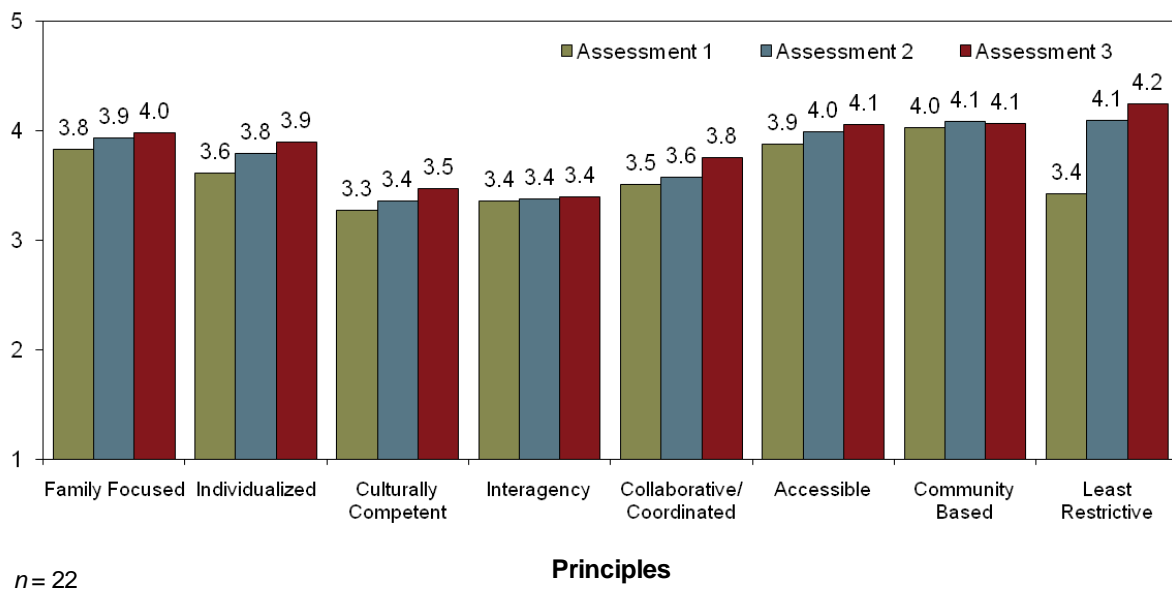
### Communities Initially Funded in 2002–2003

Most of the grant communities initially funded in 2002–2003 have been assessed at three points in their grants,<sup>23</sup> making it possible to observe how these communities have evolved over time. Figures 18 and 19 present the average infrastructure and service delivery domain ratings, respectively, for these communities.

**Figure 18: Average Infrastructure Ratings for Grant Communities Initially Funded in 2002–2003, Assessments 1, 2, and 3**



**Figure 19: Average Service Delivery Ratings for Grant Communities Initially Funded in 2002–2003, Assessments 1, 2, and 3**



Ratings on all principles in both domains increased over time, with the highest ratings for most principles being achieved in the sixth and final year of funding.<sup>24</sup> This suggests that implementing system change according to system of care principles is a

developmental activity that occurs gradually over time.

In the infrastructure domain, communities received the highest rating on the family-driven principle. In the service delivery domain, the highest ratings were received on

the accessible, community-based, and least restrictive principles. The lowest ratings were seen in the service delivery domain, on the culturally competent and interagency principles.

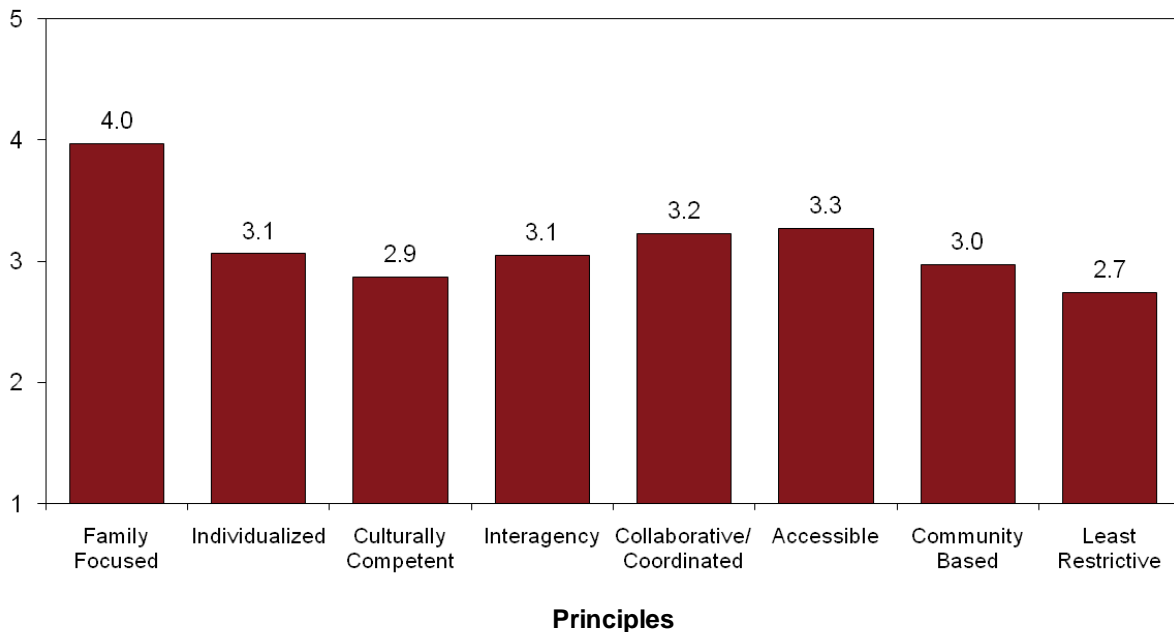
Although ratings in both domains increased over time, most ratings in the infrastructure domain started lower and showed much more improvement than those in the service delivery domain. In particular, the ratings for the individualized/youth-guided, culturally competent, and least restrictive principles in

the infrastructure domain showed this pattern.

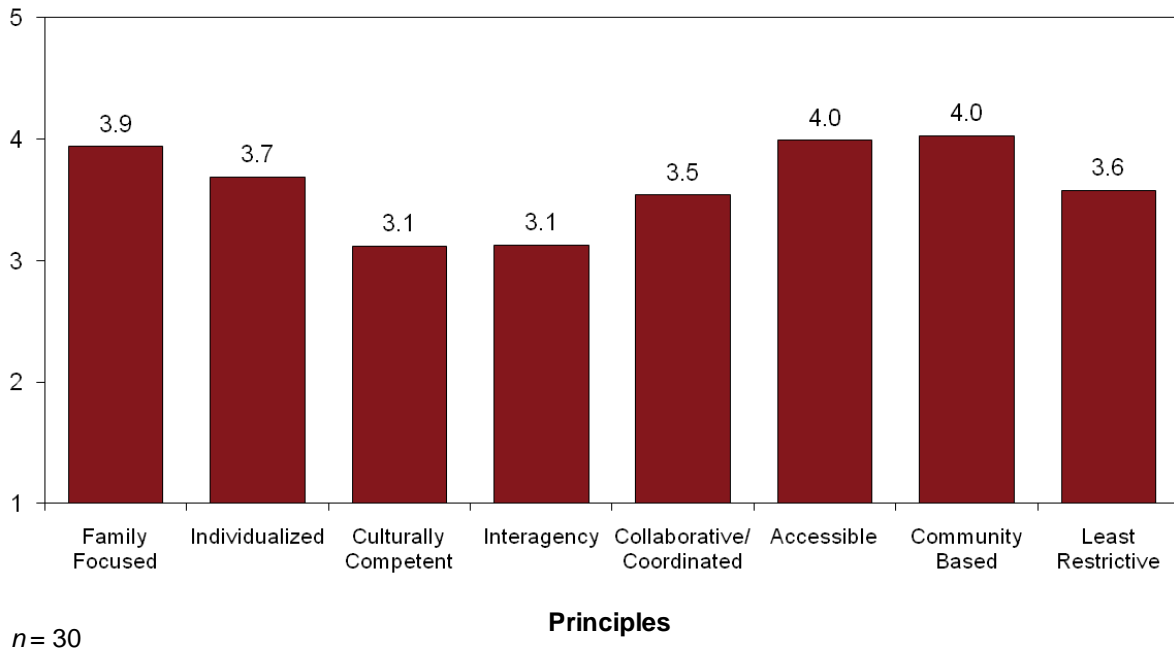
### Communities Initially Funded in 2005–2006

Grant communities initially funded in 2005–2006 have only been assessed at the beginning of their grants, so it was not possible to observe change over time in these communities. However, baseline ratings for these communities are presented in Figures 20 and 21.

**Figure 20: Average Infrastructure Ratings for Grant Communities Initially Funded in 2005–2006, Assessment 1**



**Figure 21: Average Service Delivery Ratings for Grant Communities Initially Funded in 2005–2006, Assessment 1**



In the infrastructure domain, communities received the highest average baseline ratings on the family-driven principle and the lowest average ratings on the least restrictive and culturally competent principles. In the service delivery domain, the highest average ratings were received on the family-driven, accessible, community-based principles, and the lowest average ratings were on the culturally competent and interagency principles.

Most ratings were higher in the service delivery domain than the infrastructure domain, which mirrors results from the Phase IV baseline assessment (see Figure 19). Phase V infrastructure domain average ratings were higher than Phase IV baseline assessment scores, for all eight principles. Phase V average service delivery ratings were the same as or higher than Phase IV baseline assessment ratings for six principles; only the culturally competent and interagency principles had lower Phase V average ratings than the comparable Phase IV average baseline assessment ratings.

### **Community Health Providers' Knowledge and Attitudes About Evidence-Based Treatments**

Professional mental health and health organizations such as the American Psychological Association (2005) have adopted and championed the use of evidence-based treatments (EBTs) and evidence-based practice (EBP). EBTs are interventions that have been proven effective through rigorous research methodologies. EBP, however, refers to a decision-making process that integrates the *best available research*, *clinician expertise*, and *client characteristics* (Sackett, Straus, Richardson, Rosenberg, & Haynes, 1997).

The national evaluation administered a survey to community mental health treatment providers to assess their knowledge of EBP and their perceptions about advantages and disadvantages of, implementation barriers to, and attitudes toward, EBTs (see Appendix C for a complete description of the Evidence-Based Practices Study). Analyses reported

here include responses from the 141 respondents who provided an answer to at least one of four open-ended questions on the survey.<sup>25</sup>

### Advantages and Disadvantages of Evidence-Based Treatments

Service providers who participated in the survey were asked about the advantages and disadvantages of EBTs. Service providers indicated a number of advantages and disadvantages of using EBTs (see Tables 8 and 9). The most frequently mentioned

advantage was that EBTs have a solid research base to support their effectiveness. The most frequently reported disadvantage was related to providers' concerns that EBTs are not responsive to client characteristics. Specifically there was a perception that EBTs ignore differences among clients and are not culturally sensitive. These findings suggest that most of the disadvantages cited for EBTs would disappear if they were implemented through an EBP approach that takes client characteristics into account.

**Table 8: Advantages of Using Evidence-Based Treatments\***

Advantage	%	Example
<b>Research and Practice Effectiveness</b>	65.3	<ul style="list-style-type: none"> <li>• Solid research supports effectiveness</li> <li>• Practices have proven effective</li> </ul>
<b>Resource Efficiency</b>	15.6	<ul style="list-style-type: none"> <li>• Insurance pays for EBTs and grant funds support them</li> <li>• EBTs Save time</li> </ul>
<b>Structure</b>	13.5	<ul style="list-style-type: none"> <li>• Therapy is laid out for the therapist, and includes manual and tools</li> <li>• Clear guidelines are provided for clinician</li> </ul>

\*Reported by mental health providers in grant communities initially funded in 2005–2006.

**Table 9: Disadvantages of Using Evidence-Based Treatments\***

Disadvantage	%	Example
<b>Client Characteristics Not Integrated</b>	46.8	<ul style="list-style-type: none"> <li>• EBTs ignore youth/family needs and differences</li> <li>• EBTs may not be culturally competent</li> </ul>
<b>Resource Inefficiency</b>	17.0	<ul style="list-style-type: none"> <li>• EBTs are costly to implement and sustain</li> <li>• Considerable time required to be proficient at an EBT</li> </ul>
<b>Research and Practice Problems</b>	16.3	<ul style="list-style-type: none"> <li>• Long-term psychotherapy outcomes are difficult to measure</li> <li>• Experimental research designs can be flawed</li> </ul>
<b>Too Structured</b>	16.3	<ul style="list-style-type: none"> <li>• EBTs discourage innovation</li> <li>• There is not enough freedom to customize techniques</li> </ul>

\*Reported by mental health providers in grant communities initially funded in 2005–2006.



## Implementation of Evidence-Based Treatments

Service providers who participated in the survey ( $n = 250$ ) were asked about their success in implementing EBTs. Specifically, they were asked to identify up to five EBTs with which they were familiar, to note whether they had used the EBTs according to implementation guidelines and procedures, and to explain why they did not fully follow those guidelines and procedures. Survey respondents reported that they had not fully followed the implementation guidelines for approximately 85 percent of the EBTs they reported having used.<sup>26</sup> The top three reasons given for this were (1) the need to adapt practices to fit specific youth or family situations, (2) lack of training or experience, and (3) agency or organizational barriers.

## Definitions of Evidence-Based Practice

Service providers who participated in the survey were asked to provide a definition of EBP. Most of the respondents mentioned research in their definition of EBP, but only a few referred to patient characteristics and even fewer included clinical expertise. None of the respondents included all three components described above, and qualitative analysis of the definitions revealed confusion between EBP and EBTs. These findings suggest that practitioner knowledge, beliefs, and attitudes constitute the largest barriers to full implementation of EBTs within the context of EBP. Future efforts should be directed toward service provider education about EBTs and EBP to facilitate the use of both.

## Role of Pediatricians in the Provision of Mental Health Services

Insufficient involvement of pediatricians in mental health care has long been identified

by the CMHI as an issue warranting attention. In response to this concern, pediatricians working in communities initially funded in 2002–2003 were surveyed to assess their role in the provision of mental health services (see Appendix C for a full description of this study).

## Pediatricians' Knowledge About and Involvement with the CMHI

Only 10.8 percent of the 351 responding pediatricians were somewhat or very familiar with the national CMHI, and a similar percentage were somewhat or very familiar with the local CMHI cooperative agreement effort. Of the 39 pediatricians who reported some knowledge of the local effort, 27.3 percent reported making a referral to those services, and 18.2 percent reported having worked with staff involved in the CMHI cooperative agreement during the previous 12 months.

The majority (86.5 percent) of responding pediatricians believed it was part of their job to remain in ongoing communication with mental health providers, but only 69.1 percent of them reported doing so in the previous 12 months. More than one-half of survey respondents (53.9 percent) reported finding it difficult to obtain consultations from child psychiatrists, and 25.5 percent reported finding it difficult to obtain consultations from child psychologists.

## Referrals to Mental Health Providers

The majority (74.7 percent) of the pediatricians surveyed reported that they routinely screened for mental health problems and almost all (94.8 percent) made referrals to mental health providers. However, they reported receiving feedback from mental health providers for only 40.7 percent of referrals made. In addition, more than one-third (34.7 percent) of respondents reported not knowing what percentage of the

children they referred actually ended up receiving the mental health services. Less than one-third (31.5 percent) reported often or always receiving written feedback from the mental health providers to which they had referred children, and only 10.2 percent reported often or always receiving verbal feedback from those providers.

### Barriers to Connecting Children to Mental Health Services

Table 10 presents the most frequently mentioned barriers to connecting children

and youth to mental health services and the strategies providers suggested for decreasing such barriers. A shortage of providers in the area and issues with insurance coverage and the cost of services were the primary barriers reported. Pediatricians proposed several strategies to decrease the perceived barriers, the most common being ensuring insurance coverage and reimbursement for services, and increasing the number of providers.

**Table 10: Barriers Reported by Pediatricians and Suggested Strategies for Decreasing Barriers\***

Barriers to Connecting Children to Mental Health Services	%
Shortage of providers in the area	69.0
Insurance/cost	66.8
Lengthy waiting periods for referrals to providers	20.8
Lack of commitment from parent or child	15.9
Family refusal to admit there is a problem	12.1
Strategies for Decreasing Barriers to Mental Health Services	
Ensuring insurance and reimbursement for services	49.9
Increasing the number of providers	37.6
Increasing funding for training	27.4
Improving communication	25.1
Educating patients, families, and the community	18.4

\*Reported by primary care providers in grant communities initially funded in 2002–2003.

### Sustainability of CMHI Grant Communities

The national evaluation includes a study that examines the extent to which grant communities are able to achieve sustainability to maintain their programs after the CMHI cooperative agreement ends. The study assesses the strengths and weaknesses of strategies for sustainability and the goals achieved by communities. Data for the study are gathered through a Web-based survey of local personnel. The findings below are based on the surveys completed during the third year of funding by the 25 grant communities initially funded in 2005 and surveys completed during the final year of funding by 22 communities initially funded in 2002–

2003 (see Appendix C for a complete description of this study).<sup>27</sup> Separate sections of the survey cover general strategies and financing strategies used by communities.

### Achievement of Sustainability Goals

This subsection describes findings for both grant community cohorts. Communities reported a wide range of goals relating to sustainability. Their reported success in achieving these goals differed between the third-year findings of the Phase V communities initially funded in 2005 and the findings of the Phase IV communities initially funded in 2002–2003 in their final year of funding. Communities initially funded in 2005 reported moderate success with reducing the number of children and

youth served in more restrictive settings and minimizing the need to leave the community for services in their third year. However, the sixth-year responses from communities initially funded in 2002–2003 indicated that both of these goals were among those most successfully achieved. In addition, maintaining a designated agency or office as the focal point for the management of the system of care was cited as one of the goals most successfully achieved at both points in time.

At both points in time, communities reported moderate success with two goals: (1) achieving the acceptance of the system of care philosophy among service providers, and program and system leaders; and (2) supporting and maintaining an active family organization. Using evaluation data was also a goal that respondents reporting in their final year identified as having been achieved with moderate success. This was an improvement from the third year, when it was reported as one of the goals least successfully achieved.

The one goal that communities reported no progress with was ensuring that services had

sufficient capacity. This was cited as one of the least successfully achieved goals in both the third and sixth year of funding. The ongoing need for greater service capacity for mental health services is supported by these findings.

### Strategies Used by Communities

Tables 11 and 12 depict the most effective and least effective general strategies and financing strategies reported as being used for sustainability in communities in their third and sixth years of funding, respectively.<sup>28</sup> Training and strong interagency relationships were cited among the most effective general strategies at both points in time, whereas generating support for the system of care approach was reported to be relatively ineffective. In terms of financing strategies, using in-kind space donations and accessing additional State and Federal funds were rated most effective at both points in time, whereas obtaining additional funds from other sources and other fundraising strategies were thought to be the least effective.

**Table 11: Strategies Used for Sustainability by Communities Initially Funded in 2005 During Their Third Year of Funding**

Strategy	General Strategies	Financing Strategies
<b>Most Effective</b>	<ul style="list-style-type: none"> <li>• Training on system of care approach</li> <li>• Cultivating strong interagency relationships</li> <li>• Involving constituencies</li> </ul>	<ul style="list-style-type: none"> <li>• Using in-kind space donation</li> <li>• Obtaining new/increased Federal funds</li> <li>• Creating new revenue from activities unrelated to system of care</li> </ul>
<b>Least Effective</b>	<ul style="list-style-type: none"> <li>• Generating support for system of care approach</li> <li>• Creating an advocacy base</li> <li>• Mobilizing resources</li> </ul>	<ul style="list-style-type: none"> <li>• De-categorizing funding streams</li> <li>• Charging fees for services</li> <li>• Obtaining new/increased foundation funds</li> </ul>

**Table 12: Strategies Used for Sustainability by Communities Initially Funded in 2002–2003 During Their Sixth and Final Year of Funding**

Strategy	General Strategy	Financing Strategy
<b>Most Effective</b>	<ul style="list-style-type: none"> <li>• Training on system of care approach</li> <li>• Cultivating strong interagency relationships</li> <li>• Establishing a strong family organization</li> </ul>	<ul style="list-style-type: none"> <li>• Using in-kind space donation</li> <li>• Obtaining new/increased State funds</li> <li>• Coordinating categorical funds</li> </ul>
<b>Least Effective</b>	<ul style="list-style-type: none"> <li>• Generating support for system of care approach</li> <li>• Mobilizing resources</li> <li>• Creating a focal point for system management</li> </ul>	<ul style="list-style-type: none"> <li>• Obtaining new/increased foundation funds</li> <li>• Fundraising</li> <li>• Obtaining new/increased private or corporate funds</li> </ul>

### Summary

- Grant communities are increasingly successful in implementing system of care principles over the course of their CMHI funding.
- Grant communities are also more successful in achieving various goals related to sustainability over the course of their funding. In particular, they report that they have been more successful in reducing the number of children served in more restrictive settings or having to leave the community for services.
- However, many challenges remain for grant communities in effecting system-level change, including meeting additional sustainability goals, such as ensuring that services have sufficient capacity; improving the implementation of sustainability strategies such as creating an advocacy base and mobilizing resources; ensuring service providers attain a better understanding of how to implement evidence-based practice; and fostering better communication and stronger links between primary care and mental health care providers.

## Summary

An estimated 4.5 to 6.3 million children and youth in the United States face mental health challenges. About two-thirds do not receive mental health services due to the high cost and limited availability of services in many communities. What services exist are provided by a variety of professionals who work in diverse, relatively independent, and loosely coordinated public and private facilities, agencies, and systems often referred to as the *de facto mental health service system* (U.S. Department of Health and Human Services, 1999). Therefore, families are challenged with obtaining services, and children and youth are left at risk for difficulties in school and/or in the community.

The CMHI has addressed these challenges through the development of community-based systems of care that promote positive mental health outcomes for children and youth and their families. Children and youth receiving services in funded systems of care range in age from birth to 21 years. To be eligible for services, they must have, or have had at any time during the past year, an emotional, socio-emotional, behavioral, or mental disorder that meets standardized diagnostic criteria and is of sufficient duration. The disorder must affect the child's or youth's functioning at home, in school, or in the community, or require intervention by multiple child- and youth-serving agencies.

This report to Congress provides critical information about the characteristics of children, youth, and families served in CMHI-funded systems of care; the outcomes attained for children and youth and their families, as well as their service use and service experience; how well communities have implemented system of care principles; and the sustainability of systems of care. Data from the national evaluation of the system of

care program demonstrate that the system of care communities are:

- **Reaching many children and youth typically underserved by the mental health system**—A majority of children, youth, and families served were from non-White racial groups and from families largely impacted by poverty and complex issues such as domestic violence, sexual and physical abuse, and family histories of mental health and substance abuse issues.
- **Improving outcomes for children and youth**—Among the improved outcomes for children and youth were increased emotional stability, lower levels of depression and anxiety, a decline in suicide attempts, improved school performance, and more stable living situations.
- **Enhancing family outcomes**—Caregivers' levels of strain associated with caring for their children decreased and caregivers were able to work more days in their employment situations.
- **Expanding the availability of effective supports and services**—Children, youth, and families had access to a broad array of services, including assessment and evaluation, a variety of therapies, evidence-based treatments, and case management services.
- **Implementing and maintaining fidelity to the principles of family-driven, youth-guided, individualized services**—The data from the system of care assessment demonstrated that communities were working in partnership with youth and families in the development of individualized service plans. Families and youth were also involved in system-level change efforts.

- **Saving money by reducing the amount spent on residential treatment and juvenile justice services**—On average, an estimated \$2,377 less per child or youth served (whose caregivers provided information during their intake and 24-month interviews related to their children’s inpatient service use) was spent on inpatient hospital care during the children’s or youths’ first 2 years in services. In addition, an estimated \$622 less per youth aged 11 and older (who provided information during their intake and 24-month interviews related to their arrest histories), on average, was spent on arrests during these youths’ first 2 years in services.
- **Developing and successfully using sustainability strategies**—Grant communities reported that training and strong interagency relationships were among the most effective general

sustainability strategies they had used. They also reported that using in-kind space donations and accessing additional State and Federal funds were the most effective financing strategies they had used.

As in any system-level reform effort, communities face challenges in sustaining their efforts and effecting broad system-level changes. A few of the major challenges that continue to impact communities are building a culturally and linguistically competent workforce; addressing the challenges of cross-agency collaboration to support an efficient multi-agency structure to serve the needs of children, youth, and families; and implementing multiple strategies for sustaining systems of care and their services over time. Yet, gains made by youth and families continue to provide a strong foundation for the support of further implementation of systems of care.



## References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist and 1991 profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, *101*(2), 213-232. <http://www.apa.org/journals/bul.html>.
- Achenbach, T., & Rescorla, L. (2000). *Manual for ASEBA Preschool Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- Achenbach, T., & Rescorla, L. (2001). *Manual for ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project. (2007). *2007 HCUP Nationwide Inpatient Sample (NIS), 2007*. Rockville, MD.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- American Psychological Association. (2005). *Policy statement on evidence-based practice in psychology*. Retrieved from <http://www.apa.org/practice/ebpreport.pdf>.
- Barkley, R. (1988). Child behavior rating scales and checklists. In M. Rutter, A. H. Tuma, & I. S. Lann (Eds.), *Assessment and diagnosis in child psychopathology* (pp. 113–155). New York: Guildford Press.
- Bird, H., Shaffer, D., Fisher, P., Gould, M., Staghezza, B., Chen, J., et al. (1993). The Columbia Impairment Scale (CIS): Pilot findings on a measure of global impairment for children and adolescents. *International Journal of Methods in Psychiatric Research*, *3*, 167–176.
- Brannan, A. M., & Heflinger, C. A. (2000, April). *Caregiver strain in families of children with serious emotional disorders*. Paper presented at the Building on Family Strengths: Research and Services in Support of Children and Their Families Conference, Portland, OR.
- Brannan, A., Heflinger, C. A., & Bickman, L. (1998). The Caregiver Strain Questionnaire: Measuring the impact on the family of living with a child with serious emotional disturbance. *Journal of Emotional and Behavioral Disorders*, *5*, 212–222.
- Brunk, M., Koch, J. R., & McCall, B. (2000). *Report on parent satisfaction with services at community services boards*. Richmond, VA: Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services.
- Center for Mental Health Services. (2002). *Annual report to Congress on the evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program, 2002*. Atlanta, GA: ORC Macro.
- Canino, G., Costello, J. E., & Angold, A. (1999). Assessing functional impairment and social adaptation for child mental health services research: A review of measures. *Mental Health Services Research*, *1*(2), 93–108.



- Coll, C., Buckner, J., Brooks, M., Weinreb, L., & Bassuk, E. (1998). The developmental status and adaptive behavior of homeless and low-income housed infants and toddlers. *American Journal of Public Health, 88*, 1371–1374.
- Cross, T., Bazron, B., Dennis, K., & Isaacs, M. (1989). *Towards a culturally competent system of care: A monograph on effective services for minority children who are severely emotionally disturbed* (Vol. 1). Washington, DC: CASSP Technical Assistance Center, Georgetown University Child Development Center.
- Davis, M., & Vander Stoep, A. (1997). The transition to adulthood for youth who have serious emotional disturbance: Developmental transition to young adult outcomes. *The Journal of Mental Health Administration, 24*, 400–427.
- DeNavas-Walt, C., Proctor, B., & Smith, J. (2007). *U.S. Census Bureau, current population reports, P60-233, income, poverty, and health insurance coverage in the United States: 2006*. Washington, DC: U.S. Government Printing Office.
- Drotar, D., Stein, R. E. K., & Perrin, E. C. (1995). Methodological issues in using the Child Behavior Checklist and its related instruments in clinical child psychology research. *Journal of Clinical Child Psychology, 24*(2), 184–192.
- Epstein, M. (2004). *Behavioral and Emotional Rating Scale: A strength-based approach to assessment. Examiner's manual* (2nd ed.). Austin, TX: Pro-Ed.
- Epstein, M. H., Nelson, J. R., Trout, A. L., & Mooney, P. (2005). Achievement and emotional disturbance: Academic status and intervention research. In M. H. Epstein, K. Kutash, & A. J. Duchnowski (Eds.), *Outcomes for children and youth with emotional and behavioral disorders and their families: Programs and evaluation best practices* (2nd ed.) (pp. 451–477). Austin, TX: Pro-Ed.
- Friedman, R. M., Kutash, K., & Duchnowski, A. J. (1996). The population of concern: Defining the issues. In B. A. Stroul (Ed.), *Children's mental health: Creating systems of care in a changing society* (pp. 69-96). Baltimore: Paul H. Brookes Publishing Company.
- Goode, T., & Jones, W. (2006). *Definition of linguistic competence*. Washington, DC: National Center for Cultural Competence, Georgetown University Center for Child and Human Development.
- Greene, W. H. (1997). *Econometric analysis* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating System test manual*. Circle Pines, MN: American Guidance Service.
- Hawkins, R. P., Almeida, M. C., Fabry, B., & Reitz, A. L. (1992). A scale to measure restrictiveness of living environments for troubled children and youths. *Hospital and Community Psychiatry, 43*(1), 54–58.
- Heflinger, C. A., Northrup, D. A., Sonnichsen, S. E., & Brannan, A. M. (1998). Including a family focus in research on community-based services for children with serious emotional disturbance: Experiences from the Fort Bragg Evaluation Project. In M. E. Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with emotional and behavioral disorders and their families: Programs and evaluation best practices* (pp. 261–293). Austin, TX: PRO-ED.

- Holden, E. W. (2003, June). *Substance use in the Comprehensive Community Mental Health Services for Children and Their Families Program*. Plenary presentation at the Summer System of Care Community Meeting of the Comprehensive Community Mental Health Services for Children and Their Families Program, Tulsa, OK.
- Holden, E. W., Santiago, R. L., Manteuffel, B. A., Stephens, R. L., Brannan, A. M., Soler, R., et al. (2003). Systems of care demonstration projects: Innovation, evaluation and sustainability. In A. J. Pumariega & N. C. Winters (Eds.), *The handbook of child and adolescent systems of care: The new community psychiatry* (pp. 432–458). San Francisco: Jossey-Bass.
- Hopkins, W. G. (2002). A scale of magnitudes for effect statistics. In *A new view of statistics*. Retrieved June 13, 2002, from <http://www.sportsci.org/resource/stats/effectmag.html>
- Isaacs, M. R., Huang, L. N., Hernandez, M., and Echo-Hawk, H. (2005). *The road to evidence: The intersection of evidence-based practices and cultural competence in children's mental health*. Washington, DC: The National Alliance of Multi-Ethnic Behavioral Health Associations.
- Krefetz, D., Steer, R., Gulab, N., & Beck, A. (2002). Convergent validity of the Beck Depression Inventory–II with the Reynolds Adolescent Depression Scale in psychiatric inpatients. *Journal of Personality Assessment*, 78(3), 451–460.
- Liang, K.-Y., & Zeger, S. L. (1986). Longitudinal data analysis using generalized linear models. *Biometrika*, 73(1), 13–22.
- Liao, Q., Manteuffel, B. A., Paulic, C., & Sondheimer, D. (2001). Describing the population of adolescents served in systems of care. *Journal of Emotional and Behavioral Disorders*, 9, 13–29.
- Mattison, R. E., Bagnato, S. J., & Brubaker, B. H. (1988). Diagnostic utility of the Revised Children's Manifest Anxiety Scale in children with DSM–III anxiety disorders. *Journal of Anxiety Disorders*, 2(2), 147–155.
- McConaughy, S. H. (1993). Advances in empirically based assessment of children's behavioral and emotional problems. *School Psychology Review*, 22(2), 285–307.
- Mullahey, J. (1986). Specification and testing of some modified count data models. *Journal of Econometrics*, 33, 341–365.
- National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2004). *Criminal neglect: Substance abuse, juvenile justice and the children left behind*. New York.
- Reynolds, W. (1986). *Reynolds Adolescent Depression Scale, 2nd Edition (RADS2)*. Lutz, FL: Psychological Assessment Resources.
- Reynolds, W., & Mazza, J. (1998). Reliability and validity of the Reynolds Adolescent Depression Scale with young adolescents. *Journal of School Psychology*, 36(3), 295–312.
- Reynolds, C., & Richmond, B. (1978). What I think and feel: A revised measure of children's manifest anxiety. *Journal of Abnormal Psychology*, 6(2), 271–280.
- Sackett, D., Richardson, S., Rosenberg, W., & Haynes, B. (1997). *Evidence-based medicine: How to practice and teach EBM*. New York: Churchill-Livingstone.

- Sparrow, S., Carter, A., & Cicchetti, D. (1993) *Vineland Screener: Overview, reliability, validity, administration and scoring*. New Haven, CT: Yale University Child Study Center.
- Stroul, B., & Friedman, R. (1986). *A system of care for children and youth with severe emotional disturbances* (Rev. ed.). Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center.
- Substance Abuse and Mental Health Services Administration. (2002). *Report to Congress on the prevention and treatment of co-occurring substance abuse disorders and mental disorders*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.
- Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. (2005). *Transforming mental health care in America. Federal action agenda: First steps*. HHS Pub. No. SMA-05-4069. Rockville, MD.
- Thomlison, B. (1993). Restrictiveness as a measure to monitor children's placements at the program and case level. In K. Kutash, C. J. Liberton, A. Algarin, & R. M. Friedman (Eds.), *The 5th Annual Research Conference proceedings, A system of care for children's mental health: Expanding the research base* (pp. 97–104). Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children's Mental Health.
- Titus, J. C., & Dennis, M. L. (2005). *Global Appraisal of Individual Needs—Quick (GAIN—Q): Administration and scoring guide for the GAIN—Q (version 2)*. Retrieved August 30, 2006, from [http://www.chestnut.org/LI/gain/GAIN\\_Q/GAIN-Q\\_v2\\_Instructions\\_09-07-2005.pdf](http://www.chestnut.org/LI/gain/GAIN_Q/GAIN-Q_v2_Instructions_09-07-2005.pdf)
- U.S. Department of Education. (2001). *Twenty-third annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs.
- U.S. Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General—Executive summary*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- Walker, J. S. & Bruns, E. J. (2006). Building on practice-based evidence: Using expert perspectives to define the wraparound process. *Psychiatric Services*, 57, 1579–1585
- Yoe, J. T., Bruns, E., & Burchard, J. (1995). Evaluating individualized services in Vermont: Behavioral and service outcomes. In C. J. Liberton, K. Kutash, & R. M. Friedman (Eds.), *The 7th Annual Research Conference proceedings, A system of care for children's mental health: Expanding the research base* (pp. 9–14). Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children's Mental Health.
- ZERO TO THREE. (2005). *Diagnostic classification of mental health and developmental disorders of infancy and early childhood: Revised edition (DC:0–3R)*. Washington, DC: ZERO TO THREE Press.

- 
- <sup>1</sup> Phase VI communities have not yet begun data collection; thus, no findings related to these communities are included within this report.
- <sup>2</sup> In addition to participating in and collecting data for the national evaluation, each community is required to conduct a local-level evaluation of its CMHI-funded program. The local-level evaluations include data collected by the national evaluation, and also information collected by communities on indicators of interest.
- <sup>3</sup> Interviews for the national evaluation are conducted even if the child or youth has left services.
- <sup>4</sup> Race/Ethnicity estimates for the U.S. population are based on those aged 0–17 years rather than 0–21 years.
- <sup>5</sup> Legal custody comparison data are derived from the U.S. Census Bureau: Housing, Household, and Economic Statistics Division, Fertility & Family Statistics Branch. Available from <http://www.census.gov/population/www/socdemo/hh-fam/cps2010.html>. Accessed December 1, 2010.
- <sup>6</sup> Poverty level is based on the Department of Health and Human Services poverty guidelines, which are available for the 50 States. The U.S. population figures were taken from DeNavas-Walt, Proctor, & Smith (2007), U.S. Census Bureau, Current Population Reports, P60-233, *Income, Poverty, and Health Insurance Coverage in the United States: 2006*, U.S. Government Printing Office, Washington, DC.
- <sup>7</sup> Other adults in the household may have been employed.
- <sup>8</sup> Based on the *DC:0–3R*, Axis I, which is used to determine mental health diagnoses for children aged birth to 3 years.
- <sup>9</sup> Based on clinical diagnosis determined according to the *DSM–IV*, Axis I and II.
- <sup>10</sup> The State- or county-level mental health agency, or a private mental health provider, is generally the grantee entity.
- <sup>11</sup> The reliable change index, or RCI, is a relative measure that compares a child’s, youth’s, or caregiver’s scores at two different points in time and indicates whether a change in score shows significant improvement, worsening, or stability.
- <sup>12</sup> Total Problem scores and both Internalizing and Externalizing subscale scores of 64 or above are in the clinical range.
- <sup>13</sup> CIS Global Impairment scores of 15 or above are considered in the clinical range.
- <sup>14</sup> A total score greater than 60 indicates a high level of impairment on the RCMAS. A score of 61 or higher on the RADS–2 indicates a clinical level of depression.
- <sup>15</sup> This section only describes whether services were received. It does not refer to the intensity of those services.
- <sup>16</sup> Cross, Bazron, Dennis, & Isaacs (1989) describe cultural competence as systemic and personal actions that allow effective helping behaviors with diverse groups. Goode and Jones (2006) describe linguistic competence as a similarly pervasive group of behaviors that facilitate communication with diverse groups.
- <sup>17</sup> An average rating of 2.7 on a scale of 1 (*not at all important*) to 5 (*extremely important*).
- <sup>18</sup> An average rating of 4.6 on a scale of 1 (*never*) to 5 (*always*).
- <sup>19</sup> Services purchased through flexible funds are not included in these data.
- <sup>20</sup> Poverty level is based on the Department of Health and Human Services poverty guidelines, which are available for the 50 States. The determination of being below poverty level takes into account calendar year, State, family income, and household size. Specifically, if family income is less than the relevant poverty threshold, the family is considered below the poverty level, and if family income is 1 to 1.5 times the threshold, the family is considered at or near the poverty level. In 2009, the poverty threshold for a family of four residing in the 48 contiguous States was \$22,050.
- <sup>21</sup> The location data were available for 8,406 service events.
- <sup>22</sup> Communities originally funded in 2002–2003 participated in three assessments. Communities originally funded in 2004 have only participated in two assessments so they are not included.
- <sup>23</sup> Of the 25 communities originally funded in 2002–2003, three did not receive all three assessments because their funding ended prior to the full 6-year period of the grant.
- <sup>24</sup> These trends were not tested statistically because the ratings are considered summaries of qualitative data.
- <sup>25</sup> Although 55.6 percent (213) of the 383 service providers invited to participate began the survey, only 31.5 percent (67) of those who began the survey completed all the items. Sixty-six percent (141) of the 213 survey respondents provided answers to at least one of the open-ended questions; these responses were included in this analysis. The 141 respondents represent 15 communities located within 12 States.

---

<sup>26</sup> The survey asked providers several items about their implementation of up to three EBTs. Some providers answered the items about a single EBT; some answered the items twice in reference to two EBTs; and some answered the items three times in reference to three EBTs.

<sup>27</sup> The data summarized in this report come from the third-year administration of the survey to the Phase V communities and the sixth-year administration of the survey to the Phase IV communities. The findings from different phases of grant communities tend to be very similar, so the third-year findings presented here are representative of third-year survey findings in general; similarly, the sixth-year findings presented here are representative of sixth-year survey findings in general.

<sup>28</sup> The strategies are rated on a scale of 1 to 5, with 5 indicating the greatest level of effectiveness. The “most effective” strategies were the three strategies with the highest average ratings; the “least effective” strategies were the three strategies with the lowest average ratings.



# Appendices



## Appendix A

### Glossary of Terms

**Accessible services:** services that are affordable, located nearby, and open during evenings and weekends. Staff are sensitive to and incorporate individual and cultural values. Staff also are sensitive to barriers that may keep a person from getting help. An accessible service can handle consumer demand without placing people on a long waiting list.

**Collaborative:** draws on the resources of a community, or works in coordination with other programs to provide a range of services, in-house or through interagency agreements.

**Community based:** the provision of services within close geographical proximity to the targeted community.

**Cultural competence:** requires systems and organizations to

- have a defined set of values and principles, and demonstrate behaviors, attitudes, policies and structures that enable them to work effectively cross-culturally;
- have the capacity to (1) value diversity, (2) conduct self-assessment, (3) manage the dynamics of difference, (4) acquire and institutionalize cultural knowledge, and (5) adapt to diversity and the cultural contexts of the communities they serve;
- incorporate the above in all aspects of policy making, administration, practice, and service delivery;
- involve systematically consumers, key constituencies, and communities.

**Evidence-based practice:** a *decision-making process* that integrates the best available research, clinician expertise, and client characteristics.

**Evidence-based treatments:** *interventions* that have been proven effective through rigorous research methodologies.

**Family-driven care:** families have a primary decision-making role in the care of their own children, as well as the policies and procedures governing care for all children in their community, State, Tribe, territory, and nation.

**Individualized services:** services designed to meet the unique needs of each child and family. Services are individualized when the *caregivers* pay attention to the needs and strengths, ages, and stages of development of the child and individual family members.

**Interagency:** the involvement and partnership of core agencies in multiple child-serving sectors, including child welfare, health, juvenile justice, education, and mental health.

**Intersex:** the word adopted by intersexuality activists who criticize traditional medical approaches to sex assignment and seek to be heard in the construction of new approaches.

**Intersexuality:** in humans, refers to intermediate or atypical combinations of physical features that usually distinguish male from female.

**Least restrictive:** the priority that services should be delivered in settings that maximize freedom of choice.



**Linguistic competence:** the capacity of an organization and its personnel to communicate effectively, and convey information in a manner that is easily understood by diverse audiences, including persons of limited English proficiency, those who have low literacy skills or are not literate, and individuals with disabilities. Linguistic competence requires organizational and provider capacity to respond effectively to the health literacy needs of populations served. The organization must have policy, structures, practices, procedures, and dedicated resources to support this capacity.

**Poverty level:** based on Department of Health and Human Services poverty guidelines, which are available for the 50 States; the 2008–2009 National Poverty Level is \$20,650 (based on a family of four).

**Practice-based evidence:** evidence that is derived from community consensus to support the effectiveness of treatments that are unique to a culture and supportive of cultural traditions (Isaacs, Huang, Hernandez, & Echo-Hawk, 2005).

**Serious emotional disturbance:** defined by the CMHI grant program as

- having an emotional, socio-emotional, behavioral, or mental disorder diagnosable under the *DSM–IV* or its *ICD–9–CM* equivalents, the *Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood–Revised* (DC: 0–3R), or the *Diagnostic Interview Schedule for Children* (DISC) for children at least 4 years old;
- unable to function in the family, school, or community, or in a combination of these settings, or the level of functioning is such that the child or youth requires multiagency intervention involving two or more community service agencies providing services in the areas of mental health, education, child welfare, juvenile justice, substance abuse, or primary health care. The identified disability must have been present for at least 1 year or, on the basis of diagnosis, severity, or multiagency intervention, is expected to last longer than 1 year.

**System of care:** an organizational philosophy and framework that involves collaboration across agencies, families, and youth for the purpose of improving access and expanding the array of coordinated, community-based, culturally and linguistically competent services and supports for children and youth who are diagnosed with a serious emotional disturbance and their families.

**Transition-age:** youth transitioning from adolescence to adulthood, aged 14 years and older in the *2009 Annual Report to Congress*.

**Two-Spirit:** a term created in 1990 in Winnipeg during the third annual inter-tribal Native American/First Nations gay and lesbian conference, to describe Native Americans who fulfill one of many mixed gender roles found traditionally among many Native Americans and Canadian First Nations indigenous groups.

**Wraparound:** “a team-based, collaborative process for developing and implementing individualized care plans for children with severe disorders and their families. . . . The values associated with wraparound specified that care was to be strengths based, culturally competent, and organized around family members’ own perceptions of their needs and goals” (Walker & Bruns, 2006).

**Youth-guided care:** youth are engaged as equal partners in creating systems change in policies and procedures at the individual, community, State, and national levels.

## Appendix B

# System of Care Communities of the Comprehensive Community Mental Health Services for Children and Their Families Program, 1993–2008

Project Name	Catchment Area	State
<b>Phase I (grants awarded in FYs 1993 and 1994)</b>		
Children’s Systems of Care/California 5	Riverside, San Mateo, Santa Cruz, Solano, and Ventura Counties	California
Multiagency Integrated System of Care (MISC)	Santa Barbara County	California
Sonoma-Napa Comprehensive System of Care	Sonoma and Napa Counties	California
Hawai‘i Ohana Project	Wai‘anae Coast and Leeward Oahu	Hawai‘i
Community Wraparound Initiative	Lyons, Riverside, and Proviso Townships	Illinois
COMCARE	Sedgwick County	Kansas
KanFocus	13 southeastern counties	Kansas
Wings for Children and Families	Piscataquis, Hancock, Penobscot, and Washington Counties	Maine
East Baltimore Mental Health Partnership	East Baltimore, Maryland	Maryland
K’é Project	Navajo Nation	Arizona, New Mexico, Utah
Olympia (formerly Doña Ana County Child and Adolescent Collaborative)	Doña Ana County	New Mexico
Families Reaching in Ever New Directions (FRIENDS)	Mott Haven	New York
Pitt-Edgecombe-Nash Public-Academic-Liaison Project (PEN-PAL)	Pitt, Edgecombe, and Nash Counties	North Carolina
Partnerships Project	Minot, Bismarck, and Fargo regions	North Dakota
Stark County Family Council and Southern Consortium	Stark County and 10 southeastern counties	Ohio
New Opportunities	Lane County	Oregon
South Philadelphia Family Partnership Project	South Philadelphia	Pennsylvania
Project REACH Rhode Island	Statewide	Rhode Island
The Village Project	Charleston and Dorchester Counties	South Carolina
City of Alexandria System of Care	City of Alexandria	Virginia
ACCESS	Statewide	Vermont
Wraparound Milwaukee	Milwaukee County	Wisconsin

Project Name	Catchment Area	State
<b>Phase II (grants awarded in FYs 1997 and 1998)</b>		
The Jefferson County Community Partnership	Jefferson County	Alabama
Children's Mental Health Services Initiative	San Diego County	California
Tampa-Hillsborough Integrated Network for Kids (THINK) System	Hillsborough County	Florida
Kentucky Bridges Project	3 Appalachian regions	Kentucky
Kmihqitahasultipon ("We Remember") Project	Passamaquoddy Tribe Indian Township	Maine
Mno Bmaadzid Endaad ("Be in good health at his house")	Sault Ste. Marie Tribe of Chippewa Indians and Bay Mills Ojibwa Indian Community; Chippewa, Mackinac, and Schoolcraft Counties	Michigan
Southwest Community Partnership	Detroit	Michigan
Partnership With Families	St. Charles County	Missouri
Families First and Foremost	Lancaster County	Nebraska
Nebraska Family Central	22 central counties	Nebraska
Neighborhood Care Centers	Clark County	Nevada
North Carolina Families and Communities Equal Success (FACES)	Blue Ridge, Cleveland, Guilford, and Sandhills	North Carolina
Sacred Child Project	Fort Berthold, Standing Rock, Spirit Lake, and Turtle Mountain Indian Reservations	North Dakota
Clackamas Partnership	Clackamas County	Oregon
Community Connections for Families	Allegheny County	Pennsylvania
Project Hope	Statewide	Rhode Island
The Children's Partnership	Travis County	Texas
Utah Frontiers Project	Beaver, Carbon, Emery, Garfield, Grand, and Kane Counties	Utah
Children's UPstream Services	Statewide	Vermont
Children and Families in Common	King County	Washington
Clark County Children's Mental Health Initiative	Clark County	Washington
Northwoods Alliance for Children and Families	Forest, Langlade, Lincoln, Marathon, Oneida, and Vilas Counties	Wisconsin
With Eagle's Wings	Wind River Indian Reservation	Wyoming

Project Name	Catchment Area	State
<b>Phase III (grants awarded in FYs 1999 and 2000)</b>		
Yuut Calilriit Ikaiyuquulluteng (“People Working Together”) Project	Delta region of southwest Alaska	Alaska
Project MATCH (Multi-Agency Team for Children)	Pima County	Arizona
A-KO-NES Wraparound System of Care	Humboldt and Del Norte Counties	California
Spirit of Caring Project	Contra Costa County	California
Colorado Cornerstone System of Care Initiative	Denver, Jefferson, Clear Creek, and Gilpin Counties	Colorado
Families and Communities Together (FACT) Project	Statewide	Delaware
Family HOPE (Helping Organize Partnerships for Empowerment)	West Palm Beach	Florida
Kidsnet Rockdale	Rockdale and Gwinnett Counties	Georgia
Circle Around Families	East Chicago, Gary, and Hammond	Indiana
Dawn Project	Marion County	Indiana
Community Kids	Montgomery County	Maryland
Worcester Communities of Care	Worcester	Massachusetts
PACT (Putting All Communities Together) 4 Families Collaborative	Kandiyohi, Meeker, Renville, and Yellow Medicine Counties	Minnesota
COMPASS (Children of Mississippi and Their Parents Accessing Strength-Based Services)	Hinds County	Mississippi
CARE NH: Community Alliance Reform Effort	Manchester, Littleton, and Berlin	New Hampshire
Burlington Partnership	Burlington County	New Jersey
Westchester Community Network	Westchester County	New York
North Carolina System of Care Network	11 counties	North Carolina
Gateways to Success	Greenwood County	South Carolina
Nagi Kicopi–Calling the Spirit Back Project	Oglala Sioux Tribe, Pine Ridge Indian Reservation, Pine Ridge	South Dakota
Nashville Connection	Nashville	Tennessee
Mountain State Family Alliance	12 counties	West Virginia

Project Name	Catchment Area	State
<b>Phase IV (grants awarded in FYs 2002, 2003, and 2004)</b>		
Ch'eghutsen' A System of Care	Fairbanks Native Association	Alaska
Glenn County Children's System of Care	Glenn County	California
La Familia Sana	Monterey County	California
OASIS (Obtaining and Sustaining Independent Success)	Sacramento County	California
San Francisco Children's System of Care	San Francisco	California
Urban Trails	Oakland	California
Project BLOOM	El Paso, Fremont, and Mesa Counties, and the City of Aurora	Colorado
Partnership for Kids (PARK) Project	Statewide	Connecticut
D.C. Children Inspired Now Gain Strength (D.C. CINGS)	Districtwide	Washington, District of Columbia
One Community Partnership	Broward County	Florida
I'Famagu'onta (Our Children)	Territorywide	Guam
Building on Each Other's Strengths	Statewide	Idaho
System of Care Chicago	Chicago	Illinois
Kentuckians Encouraging Youth to Succeed (KEYS)	Boone, Campbell, Carroll, Gallatin Grant, Kenton, Owen, and Pendleton Counties	Kentucky
Louisiana Youth Enhanced Services for Children's Mental Health (LA-YES)	Jefferson, Orleans, Plaquemines, St. Bernard, and St. Tammany Parishes	Louisiana
Show Me Kids Project	Barry, Christian, Green, Lawrence, Stone, and Taney Counties	Missouri
Transitions	St. Louis County and City	Missouri
Missoula Kids Integrated Delivery System Management Authority (KMA)	Statewide and Crow Nation	Montana
Families Together in Albany County	Albany County	New York
Family Voices Network	Erie County	New York
Coordinated Children's Services Initiative (CCSI)/The Family Network	New York City	New York
Tapestry	Cuyahoga County	Ohio
Choctaw Nation CARES	Choctaw Nation of Oklahoma	Oklahoma
Great Plains Systems of Care	Beckham, Canadian, Kay, Oklahoma, and Tulsa, Counties	Oklahoma
Columbia River Wraparound	Gilliam, Hood River, Sherman, and Wasco Counties	Oregon
Puerto Rico Mental Health Initiative for Children	Llorens Torres Housing Project in San Juan, Municipality of Gurabo	Puerto Rico
YouthNet	Chester, Lancaster, and York Counties and Catawba Indian Nation	South Carolina

<b>Project Name</b>	<b>Catchment Area</b>	<b>State</b>
<b>Phase IV (grants awarded in FYs 2002, 2003, and 2004) (continued)</b>		
Border Children's Mental Health Collaborative	El Paso County	Texas
Community Solutions	Fort Worth	Texas
<b>Phase V (grants awarded in FYs 2005 and 2006)</b>		
Sewa Uusim	Pascua Yaqui Tribe of Arizona	Arizona
ACTION for Kids (Arkansas Collaborating to Improve Our Network)	Craighead, Lee, Mississippi, and Phillips Counties	Arkansas
Connecting Circles of Care	Butte County	California
Seven Generations System of Care	Los Angeles County	California
Project ABC (About Building Connections for Young Children and Families)	Los Angeles County	California
Transforming Children's Mental Health Through Community and Parent Partnerships	Placer County	California
Building Blocks	New London County	Connecticut
Sarasota Partnership for Children's Mental Health	Sarasota County	Florida
Project Ho'omohala (Transition to Adulthood)	Honolulu	Hawai'i
McHenry County Family CARE (Child/Adolescent Recovery Experience)	McHenry County	Illinois
The Community Circle of Care	10 northeastern counties	Iowa
THRIVE	Androscoggin, Franklin, and Oxford Counties	Maine
Central Massachusetts Communities of Care	Worcester County (excluding the City of Worcester)	Massachusetts
Impact	Ingham County	Michigan
Kalamazoo Wraps	Kalamazoo County	Michigan
Children Succeed Initiative: A Six-County Children's Health System of Care	Kittson, Mahnomen, Marshall, Norman, Polk, and Red Lake Counties	Minnesota
System Transformation of Area Resources and Services (STARS)	Benton, Sherburne, Stearns, and Wright Counties	Minnesota
CommUNITY Cares	Forrest, Lamar, and Marion Counties	Mississippi
Circle of H.O.P.E. (Home, Opportunities, Parents & Providers, Empowerment)	Andrew and Buchanan Counties	Missouri
Blackfeet Po'Ka System of Care	Blackfeet Reservation	Montana
Monroe County Achieving Culturally Competent and Effective Services and Supports (Monroe County ACCESS)	Monroe County	New York
MeckCARES	Mecklenburg County	North Carolina

Project Name	Catchment Area	State
<b>Phase V (grants awarded in FYs 2005 and 2006) (continued)</b>		
Wraparound Oregon: Early Childhood	Multnomah County	Oregon
Starting Early Together (SET)	Allegheny County	Pennsylvania
Beaver County's System of Care: Optimizing Resources, Education and Supports (BC-SCORES)	Beaver County	Pennsylvania
Rhode Island Positive Education Partnership	Statewide	Rhode Island
Tiwahe Wakan (Families as Sacred)	Yankton Sioux Reservation	South Dakota
Mule Town Family Network	Maury County	Tennessee
Systems of Hope	Harris County	Texas
The SAGE Initiative	Statewide	Wyoming
<b>Phase VI (grants awarded in FY 2008)</b>		
Delaware's B.E.S.T. (Bringing Evidence-based System-of-Care & Treatment) for Young Children and Their Families	Statewide	Delaware
KidsNet Northwest	Bartow, Dade, Floyd, Haralson, Paulding, Polk, and Walker Counties	Georgia
One Community, One Family	8 southeastern counties	Indiana
Kentucky SEED (System to Enhance Early Development)	Statewide	Kentucky
MD CARES (Maryland Crisis and At Risk for Escalation Diversion Services)	Baltimore City	Maryland
Tapestry of Chautauqua Initiative	Chautauqua County	New York
Nassau County No Wrong Door Family Support System of Care (NWD-FSS)	Nassau County	New York
Family Matters of Orange County	Orange County	New York
Alamance Alliance for Children and Families	Alamance County	North Carolina
Protecting the Future	Creek Nation	Oklahoma
Oklahoma System of Care Statewide Initiative (OSOCSI)	Statewide	Oklahoma
Nak-Nu-Wit	Clackamas, Multnomah, and Washington Counties, Oregon, and Clark County, Washington	Oregon, Washington
JustCare Family Network, A System of Care for Shelby County	Shelby County	Tennessee
Hand in Hand: Planting Seeds for Healthy Families	Hood, Johnson, Palo Pinto, Parker, and Tarrant Counties	Texas
Rural Children's Initiative	11 Panhandle counties	Texas



Project Name	Catchment Area	State
<b>Phase VI (grants awarded in FY 2008) (continued)</b>		
Mental Health Services for Transition-Aged Youth	Statewide	Vermont
Lummi System of Care Initiative	Lummi Nation	Washington
Yakima Valley Youth and Family Coalition	Yakima County	Washington

## Appendix C

### Description of Study Components

#### Core Components of the National Evaluation

##### Cross-Sectional Descriptive Study

The primary purpose of the Descriptive Study is to provide information on the children and families served by the systems of care across grant communities. Data for the Descriptive Study were obtained at intake into services and included demographic characteristics, custody status, living arrangements, child and family risk factors, presenting problems, clinical diagnoses, functional status, and mental health service history. Descriptive information about the child's history of chronic illness; medications for physical, emotional, or behavioral problems; and status as a Medicaid recipient was collected, as was information about family socioeconomic status, composition, and available resources. This type of information about child and family characteristics contributes to our understanding of the similarities and differences among the children served as well as the extent to which these factors may be related to family service experiences, changes in children's behavioral and emotional problems and social functioning, and changes in caregiver strain and family functioning over time. Descriptive information was collected on every child who was enrolled in system of care programs. Please refer to Appendix D for a list of descriptive data collected in the study.

##### Longitudinal Child and Family Outcome Study

The primary purpose of the Outcome Study is to assess changes over time among

children, youth, and families participating in system of care services. Outcome data collected from caregivers included the child's clinical and social functioning, behavioral and emotional strengths, restrictiveness of living situation, educational performance, and satisfaction with services. Assessments of family functioning, family resources, and caregiver strain also were obtained from caregivers. In addition, youth 11 years or older reported on their own delinquent behaviors, behavioral and emotional problems, history of substance use, perceptions of family functioning, and service satisfaction. Standardized and nonstandardized instruments typical in the field of children's mental health services were used to collect these data. Please see Appendix D for detailed descriptions of these instruments. In addition to meeting the eligibility for enrollment, children enrolled in system of care programs must meet all the following criteria to be enrolled in the Outcome Study:

- Enter the grant-funded system of care (child has completed intake, descriptive information has been collected, and caregiver has consented to treatment).
- Be receiving or on the verge of receiving services in the community by the time of the baseline Outcome Study interview. Services can be considered to include clinical assessment, contact with a service coordinator (case manager), and initial efforts to plan additional services.
- Have a caregiver who legally can grant consent to participate in the evaluation (can grant consent for treatment), or a legal custodian who will grant consent for the child and the child's primary

caregiver to participate in the Outcome Study.

- Have a caregiver who can provide the information requested and is capable of completing a data collection interview (e.g., no severe cognitive impairment).
- Not be the sibling of a child already enrolled in the Outcome Study.
- If applicable, be selected through the sampling method used at the community.

### **Service Experience Study**

This study, conducted among the sample of children participating in the Outcome Study, examines whether clients experience services according to system of care principles. Because efforts to develop a system infrastructure that supports service delivery and embodies system of care principles may not succeed at changing how services are provided directly to children, youth, and families, the study assesses intervention fidelity, satisfaction with services, cultural competence, accessibility and coordination of services, and perceived helpfulness of services. Data are collected from caregivers and youth at all follow-up data collection points if the child and family have received services in the previous 6 months. See Appendix D for detailed descriptions of the instruments used in this study component.

### **Services and Costs Study**

The primary purpose of the Services and Costs Study is to describe the types of services used by children, youth, and families; their patterns of service use; and the costs associated with these services. Additionally, the study explores the relationship among service use, costs, and outcomes. Data on services and costs provide opportunities to demonstrate at the local and national levels how system of care services affect both service outcomes and

behavioral outcomes among those served. This information can be used in the aggregate to track changes in systems of care over time. Such changes include shifts in expenditures and service use patterns (e.g., reductions in use of residential services, increase in family support service use). When services and costs data are available from multiple partner agencies within a system of care community, aggregate data can be used to identify cost-shifting across service sectors (e.g., from juvenile justice to mental health).

In conducting the Services and Costs Study, the national evaluation provides training to communities and conducts a survey of their management information systems and technology capabilities during their first year of funding. This is followed by further training and technical assistance through workshops, Webinars, and conference calls.

This study relies on data that communities can provide from their existing management information systems. Because communities vary widely in the completeness, quality, and availability of usable services and costs data, the analysis of services and costs data is tailored to individual communities.

### **System of Care Assessment**

This study examines whether programs have been implemented in accordance with system of care program theory and documents how systems develop over time to meet the needs of the children and families they serve. Of particular interest is whether services are delivered in an individualized, family-focused, culturally relevant, and coordinated manner, and whether the system involves multiple child-serving agencies. Please see Appendix D for a detailed description of this assessment tool. Site visits were conducted every 18 to 24 months. Information was collected through a combination of document reviews,

review of randomly selected case records, semistructured interviews, observations made onsite, and follow-up telephone interviews to clarify information. Categories of respondents included project directors, agency representatives, direct service providers, care coordinators, youth coordinators, representatives from family organizations, and individual family members.

Thirteen separate semistructured interview guides were used to collect data from key constituencies at each system of care community, including the project director, representatives from core agencies, family organization representatives, direct service providers, youth coordinators, youth who are being served, and caregivers whose families are being served. Each respondent was asked questions that they would be most able to answer given their function and perspective. For example, service planning questions were asked of caregivers and case managers and not of the project director. The interviews varied in length, requiring 30 minutes (e.g., intake worker) to 2 hours (e.g., project director) to complete. Some of the items in the interviews were for context or descriptive purposes, while others were linked to indicators on the framework. For items that are rated, interviewers used the response provided by the individual respondent to rate the system on a 5-point scale using the established criteria for that item. That is, the qualitative data collected in the semistructured interviews were used to rate the system of care community on each item. The responses of the various constituent informants were rated separately.

### **Sustainability Study**

The Sustainability Study explores the extent to which systems of care are maintained after funding from the CMHS grant program has ended, identifies features of systems of

care that are more likely to be sustained, and identifies factors that contribute to or impede the ability to sustain the systems of care developed with grant support. The intent of the study is to learn from the experience of earlier grantees in order to assist current and future grantees to maximize the likelihood that their systems of care will be maintained over time.

The study method is primarily built around a Web-based survey completed by key constituencies in graduated sites and those nearing graduation. Hard copies of the survey in English and Spanish are available upon request. Four constituents in each grant community complete the Web-based survey: the project director, a key person responsible for children's mental health in the community, a family member, and a representative from another child-serving agency. The survey protocol explores aspects of systems of care that are likely to be sustained and aspects that are less likely to be sustained, factors affecting sustainability, and what effects these factors have had in each grant community.

## **Special Studies Added to the National Evaluation Active in FY 2009**

### **Evidence-Based Practices Study**

The purpose of the Evidence-Based Practices (EBP) Study is to examine the effects of various factors on the implementation of EBP in system of care sites initially funded in 2005–2006. The EBP Study includes a multi-level, mixed-method approach to the collection of information from multiple respondent groups within and across communities. Data from two substudies are described in this report: (1) Provider Practice Substudy; and (2) Evidence-Based Practice Experiences Substudy.

## Provider Practice Substudy

The Provider Practice Substudy (PPS) involves the administration of a revised Evidence-Based Treatment Survey and provides necessary contextual detail concerning the knowledge and use of EBP among service providers to children referred into funded system of care communities. These service providers can be considered the destination of treatment technology transfer, and a further understanding of their role in supporting the implementation of these practices is needed. The PPS builds upon prior studies conducted by ICF Macro, is cross-sectionally administered in the last quarter of contract years 2, 4, and 5 of the evaluation, and includes data collection from mental health service providers affiliated with the systems of care in all 30 communities initially funded in 2005–2006.

## Evidence-Based Practice Experiences Substudy

For the Evidence-Based Practice Experiences Substudy (EBPES), data are collected from participants in the Longitudinal Child and Family Outcome Study at all communities initially funded in 2005–2006 regarding their participation in and experience with EBP. This is accomplished through the Evidence-Based Practices Experience Measure (EBPEM), an addendum to the Multi-Sector Service Contacts–Revised (MSSC–R), which assesses families’ perceptions of services provided and their effectiveness in combination with other community-specific measures such as the System of Care Assessment. The instrument is administered at follow-up data collection points every 6 months.

## Primary Care Provider Study

The purpose of the Primary Care Provider Study is to investigate the role of primary

health care providers (PCPs) in systems of care and to further understand the impact of services provided within primary care on child and family outcomes. More specifically, the study is designed to answer these main questions:

- What is the physical health status, health care utilization, and health care financing status of children and youth with serious emotional disturbance participating in the program?
- How do the physical health status, health care utilization, and health care financing status of children and youth with serious emotional disturbance participating vary over time and affect child and family outcomes?
- What are the factors that influence primary care providers’ active participation in the care of children and youth with serious emotional disturbance who are being served within systems of care?
- How do PCPs identify and treat children and youth with mental health needs?
- What are the factors that facilitate and interfere with communication and interaction between PCPs and mental health providers?

Constituencies, including youth, caregivers, service providers, project directors, and primary care personnel, will guide this three-part study. Part 1 addressed the questions “What is the physical health status, health care utilization, and health care financing status of children participating in the program?”, “How do these factors vary over time?”, and finally, “How do these factors affect child and family outcomes?” This part of the study involved collecting descriptive data on participating children’s health status, care, and financing through the Enrollment and Demographic Information Form (EDIF) and Child Information Update Form (CIUF). EDIFs are administered to all

children who have received CMHS-supported services. Children enrolled in the Longitudinal Child and Family Outcome Study also will complete a follow-up version of the EDIF called the Child Information Update Form every 6 months thereafter for 36 months.

Part 2, conducted during year 2 of the evaluation, addressed the question “What are the factors that influence primary health care providers’ active participation in the care of children who are being served within systems of care?” Data were obtained from large and small in-person and telephone discussion groups, and a single key informant interview. Data will be used to develop a model of the factors influencing the role of primary care providers in systems of care and to develop a Primary Care

Provider Survey to be administered in Part 3 of this study.

Part 3, conducted during years 3 through 5 of the evaluation, addressed the questions “How do PCPs identify and treat children and youth with mental health needs?” and “What are the factors that facilitate and interfere with communication and interaction between PCPs and mental health providers?” During Part 3 of the study, a sample of 675 pediatricians located in ZIP Codes serving children in all system of care communities initially funded in 2002–2004 were randomly selected and asked to complete the Primary Care Provider Survey. Pediatricians responded via a Web-based survey or a paper-and-pencil version of the survey. A total of 351 pediatricians responded to the survey.



## Appendix D

### Measures

#### Descriptive, Outcome, and Service Experience Study Measures

Descriptive data were collected primarily from caregivers as their children entered system of care services, and some data such as diagnostic assessments were drawn from intake records. For children enrolled in the Longitudinal Child and Family Outcome Study, caregivers reported on children's strengths, behavioral and emotional problems, cultural competence of services, caregiver strain, social functioning, educational history, family functioning, stability of the child's living situation, service utilization, and child development. Children 11 years or older reported on their behavioral and emotional problems, delinquent behaviors, anxiety, depression, and history of substance use. Both caregivers and youth reported on the child's demographic information, medications, and chronic illnesses, and their satisfaction with services.

#### Measures

- **Demographics, medications, chronic illnesses**—Caregiver Information Questionnaire (CIQ) and Youth Information Questionnaire (YIQ)
- **Caregiver strain**—Caregiver Strain Questionnaire (CGSQ; Brannan et al., 1998)
- **Child and youth behavior**—Child Behavior Checklist 1½–5 (CBCL 1½–5; Achenbach & Rescorla, 2000) and Child Behavior Checklist 6–18 (CBCL 6–18; Achenbach & Rescorla, 2001)
- **Child development**—Vineland Screener 0–Under 3 (VS1), Vineland Screener 3–5, (VS2), and Vineland Screener 6–12 (VS3) (Sparrow et al., 1993)
- **Child and youth social functioning**—Columbia Impairment Scale (CIS; Bird et al., 1993)
- **Child and youth strengths**—Behavioral and Emotional Rating Scale–2: Parent Rating Scale (BERS–2C; Epstein, 2004) and Behavioral and Emotional Rating Scale–2: Youth Rating Scale (BERS–2Y; Epstein, 2004)
- **Cultural competence of services**—Cultural Competence and Service Provision Questionnaire (CCSP)
- **Delinquent behaviors**—Delinquency Survey–Revised (DS–R)
- **Educational indicators**—Education Questionnaire–Revised (EQ–R)
- **Family functioning**—Family Life Questionnaire (FLQ)
- **Satisfaction with services**—Youth Services Survey (YSS; Brunk et al., 2000); Youth Services Survey for Families (YSS–F; Brunk et al., 2000)
- **Service use information**—Multi-Sector Service Contacts–Revised (MSSC–R)
- **Stability of living situations**—Living Situations Questionnaire (LSQ)
- **Substance abuse**—Substance Use Survey–Revised (SUS–R) and GAIN Quick–R Substance Problem Scale (GAIN)
- **Youth anxiety**—Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978)
- **Youth depression**—Reynold's Adolescent Depression Scale–Second Edition (RADS–2; Reynolds, 1986)



## Descriptions of the Measures

### **Behavioral and Emotional Rating Scale–Second Edition, Parent Rating Scale (BERS–2C)**

The BERS–2C is administered to caregivers of children participating in the Outcome Study. The 57-item checklist measures children’s behavioral and emotional strengths in six different areas: interpersonal strength, family involvement, intrapersonal strength, school functioning, affective strength, and career strength. Caregivers may respond based on a 4-point scale: (0) *not at all like your child*, (1) *not much like your child*, (2) *like your child*, and (3) *very much like your child*.

Several analyses reported in the BERS–2 Examiner’s Manual, 2nd Edition indicated that the BERS–2C demonstrates adequate reliability. Coefficient alphas are reported for each BERS–2C subscale across 12 different age intervals in the BERS–2 Examiner’s Manual, 2nd Edition. The average coefficient for the six subscales collapsed across the age intervals ranged from .80 to .93. The average for the strength index across the 12 age intervals was .97. Two studies reported in the BERS–2 Examiner’s Manual, 2nd Edition examined the test–retest reliability of the BERS–2C. In the first study, test–retest correlation coefficients for the BERS–2C subscales ranged from .80 to .94. The coefficient for the strength index was .90. In the second study, test–retest correlation coefficients for the BERS–2C subscales ranged from .88 to .92, while the coefficient for the strength index was .87. All of these coefficients are in the very large range (Hopkins, 2002). Finally, inter-rater reliabilities between parent and student ratings on each of the subscales ranged from .50 to .63, while the inter-rater reliability on the Strength Index was .54.

Several analyses reported in the BERS–2 Examiner’s Manual, 2nd Edition indicate that the BERS–2C demonstrates adequate validity. Concerning construct-identification validity, confirmatory factor analysis supports the factor structure of the five core subscales used in calculating the strength index (Epstein, 2004). In addition, correlations between the BERS–2C standard scores and the Child Behavior Checklist (Achenbach & Rescorla, 2001) total problems score, broadband syndrome scores, narrow-band syndrome scores, competence scores, and total competence score were in the expected direction, demonstrating criterion-prediction validity. Finally, correlations between the BERS–2C standard scores and the Total Social Skills scale of the Social Skills Rating System, Parent Form (Gresham & Elliot, 1990) were positive, while correlations between the BERS–2C standard scores and the Total Problem Behavior scale of the Social Skills Rating System were negative. These correlations were in the hypothesized direction as well, further evidencing criterion-prediction validity.

### **Behavioral and Emotional Rating Scale–Second Edition, Youth Rating Scale (BERS–2Y)**

The BERS–2Y is a youth version of the BERS–2C. It is administered to youth 11 years and older who are participating in the Outcome Study. As with the caregiver version, the BERS–2Y uses a 57-item checklist to measure children’s behavioral and emotional strengths in six different areas: interpersonal strength, family involvement, intrapersonal strength, school functioning, affective strength, and career strength. Youth may respond based on a 4-point scale: (0) *not at all like you*, (1) *not much like you*, (2) *like you*, and (3) *very much like you*.

Several analyses reported in the BERS–2 Examiner’s Manual, 2nd Edition indicated that the BERS–2Y demonstrates adequate reliability. Coefficient alphas are reported for each BERS–2Y subscale across six different age intervals in the BERS–2 Examiner’s Manual, 2nd Edition. The average coefficient for the six subscales collapsed across the age intervals ranged from .79 to .88, while the average for the strength index across the six age intervals was .95. Test–retest correlation coefficients for the BERS–2Y subscales ranged from .84 to .91, while the coefficient for the strength index was .91. Finally, inter-rater reliabilities between parent and student ratings on each of the subscales ranged from .50 to .63, while the inter-rater reliability on the strength index was .54.

Several analyses reported in the BERS–2 Examiner’s Manual, 2nd Edition indicated that the BERS–2Y demonstrates adequate validity. Concerning construct-identification validity, confirmatory factor analysis supports the factor structure of the five core subscales used in calculating the Strength Index (Epstein, 2004). In addition, correlations between the BERS–2Y standard scores and the Youth Self-Report (Achenbach, 1991) total problems score, broadband syndrome scores, narrow-band syndrome scores, competence scores, and total competence score were in the expected direction, demonstrating criterion-prediction validity. Finally, correlations between the BERS–2Y standard scores and the Total Social Skills scale of the Social Skills Rating System, Student Form (Gresham & Elliot, 1990) were in the hypothesized direction (i.e., positive), further evidencing criterion-prediction validity.

### ***Caregiver Information Questionnaire (CIQ)***

The CIQ is administered to all caregivers of children participating in the Longitudinal Child and Family Outcome Study. There are caregiver and staff-as-caregiver versions, as well as an intake version and follow-up versions that are administered every 6 months for up to 36 months.

The CIQ was developed to capture uniform demographic data about caregivers to whom the national evaluation instruments are being administered. The intake version of the CIQ to which caregivers respond contains 39 items with subparts that describe the child and family. These items gather information on demographic characteristics, child and family risk factors, family composition, legal custody of the child, the child’s mental and physical health service use history, caregiver employment status, attitudes about coercion in receiving services, and the child’s presenting problem(s). The staff-as-caregiver version contains a reduced number of items, since some questions items can or should not be posed to staff-as-caregivers. The follow-up versions of the CIQ contain a reduced number of items because some questions are not repeated at follow-up.

### ***Caregiver Strain Questionnaire (CGSQ)***

The CGSQ assesses the extent to which caregivers are affected by the special demands associated with caring for a child with behavioral and emotional problems. The CGSQ provides a way to assess the impact that participating in system of care services has on the strain caregivers and families may experience (e.g., determining whether strain lessens over time as better services and supports are provided by the system of care).

The CGSQ has demonstrated good reliability and validity. Confirmatory factor analysis supported the existence of three related dimensions of caregiver strain. The three subscales on the CGSQ (Objective Strain, Subjective Externalizing Strain, Subjective Internalizing Strain) demonstrated adequate internal consistency (Brannan & Heflinger, 2000; Heflinger, Northrup, Sonnichsen, & Brannan, 1998).

Preliminary analysis of national evaluation data collected from communities initially funded in 2002–2003 shows good internal consistency for the three subscales. The Cronbach’s alphas are .92 for objective strain, .67 for subjective internalizing strain, and .82 for subjective externalizing strain.

### ***Child Behavioral Checklist 1½–5 (CBCL 1½–5)***

The CBCL 1½–5 is administered to caregivers of children participating in the Outcome Study. It measures behavioral and emotional problems in children aged 1½–5 years. The CBCL 1½–5 includes three main sections. For the national evaluation, caregivers are required only to complete the behavioral and emotional problems section. In this section, caregivers report on 99 problem items by indicating the degree to which each statement (e.g., cruel to animals) describes their child. Response options are the same for all items in this section: (0) *not true*, (1) *somewhat or sometimes true*, and (2) *very true or often true*.

Using a national normative sample and large clinical samples as norms, the checklist produces seven narrow-band syndrome T-scores: emotionally reactive, anxious/depressed, somatic complaints, withdrawn, sleep problems, attention problems, and aggressive behavior; two broadband syndrome T-scores: internalizing and externalizing; and a total problems T-score.

Reported test–retest reliabilities for the seven narrow-band scales were between .68 and .92. The test–retest reliabilities for the Internalizing and Total Problems scales were both .90, while the Externalizing scale had a test–retest reliability of .87. The average test–retest reliability across all scales was .85. Finally, the CBCL 1½–5 demonstrates adequate content, criterion-related, and construct validity using a variety of techniques (Achenbach & Rescorla, 2000).

### ***Child Behavioral Checklist 6–18 (CBCL 6–18)***

The CBCL 6–18 is administered to caregivers of children and youth participating in the Longitudinal Child and Family Outcome Study. The CBCL 6–18 is designed to provide a standardized measure of behavioral and emotional problems among children aged 6–18 years. The CBCL 6–18 has been widely used in children’s mental health services to assess social competence, behaviors, and feelings. It elicits a rich and detailed description of behaviors and symptoms that provides more information than diagnosis alone provides. The CBCL 6–18 contains three main sections. For the national evaluation, caregivers are required only to complete the social competence section and the behavioral and emotional problem section. The social competence section collects information related to involvement in organizations, sports, peer relations, and school performance (e.g., “About how many times a week does your child do things with any friends outside of regular school hours?”). Response options for this section vary.

The behavioral and emotional problem section contains 113 items and documents the presence of various problems and symptoms (e.g., argumentativeness,

withdrawal, aggression). Response options are the same for all items in this section: (0) *not true*, (1) *somewhat or sometimes true*, and (2) *very true or often true*.

The checklist produces a total problems T-score; two broadband syndrome T-scores; eight narrowband syndrome T-scores; competence T-scores in activities, social situations, and school; and a total competence T-score. The social competence items are scored to provide a more strengths-based perspective, but should be interpreted cautiously due to cultural biases and a response format that often leads to incomplete data (Drotar, Stein, & Perrin, 1995).

Achenbach and Rescorla (2001) have reported a variety of information regarding internal consistency, test–retest reliability, construct validity, and criterion-related validity. Good internal consistency was found for the Internalizing, Externalizing, and Total Problems scales ( $\alpha \geq .90$ ). The CBCL 6–18 demonstrated good test–retest reliability after 8 days (Pearson  $r$  at or above .80 for all scales). Moderate to strong correlation with the Connor Parent Rating Scale–Revised and the Behavior Assessment System for Children (BASC) Scales (Pearson  $r$  coefficients ranged from .34 to .89) supported the construct validity of the CBCL 6–18.

The CBCL 6–18 was, for most items and scales, capable of discriminating between children referred to clinics for needed mental health services and those youth not referred (Achenbach & Rescorla, 2001). A variety of other studies have also shown good criterion-related or discriminant validity (e.g., Barkley, 1988; McConaughy, 1993). Inter-observer agreement was evident in a meta-analysis of 119 studies that used the CBCL 6–18. In 269 separate samples, statistically significant correlations (using

Pearson  $r$ ) were found among ratings completed by parents, mental health workers, teachers, peers, observers, and adolescents themselves (Achenbach, McConaughy, & Howell, 1987).

The instrument has been nationally normed on a proportionally representative sample of children across income and racial/ethnic groups. Racial/ethnic differences in total and subscale scores of the CBCL 6–18 disappeared when controlling for socioeconomic status, suggesting a lack of instrument bias related to racial/ethnic differences.

### **Columbia Impairment Scale (CIS)**

The CIS evaluates level of impairment in four basic areas of functioning and provides a global measure of impairment. The CIS lists 13 problems commonly encountered by youth. Within each of the four functioning areas (interpersonal relations, functioning in job or schoolwork, use of leisure time, and broad psychopathological domains), caregivers rate the extent to which each item is a problem for his/her child, using a 4-point scale: (0) *no problem* to (4) *a very big problem*. Response options 1, 2, and 3 indicate the extent to which a particular item is of *some problem*; 3 indicates a greater level of impairment and 1 indicates a lower level of impairment.

Reliability and validity were measured on a sample from an ethnically, geographically, and socioeconomically diverse population ranging in age from 9 to 17 ( $n = 121$ ) and a demographically comparable sample of clinical subjects ( $n = 61$ ). Validity was determined by comparing scores from the CIS with those from the clinician-scored Children’s Global Assessment Scale (CGAS), with a correlation of  $-0.73$  between the CIS and CGAS (scales for the two measures move in opposite directions). There was high internal consistency across



the four conceptual domains measured by the CIS (range .43 to .77), and the measure was able to discriminate between clinical and community subjects ( $p < .001$ ). The CIS has good test–retest reliability, with an intraclass correlation coefficient = .89.

### ***Cultural Competence and Service Provision Questionnaire (CCSP)***

The CCSP is comprised of 16 items that assess the importance and inclusion of culture in services provided to the child. The first three items of the CCSP assess the caregivers' ratings of the importance of their providers' understanding and inclusion of culture in their service provision on a scale from 1 = *not at all important* to 5 = *extremely important*. The remaining 13 items measure the frequency with which service providers incorporate their understanding of culture in their practices on a scale from 1 = *never* to 5 = *always*.

Preliminary reliability information for the CCSP indicate that internal consistency is acceptable for the importance subscale (Cronbach's alpha = .757) and the provider practices subscale (Cronbach's alpha = .879). Further empirical assessment of the CCSP's reliability and validity will be conducted when additional data have been received.

### ***Delinquency Survey–Revised (DS–R)***

The DS–R gathers information reported by youth about their contacts with law enforcement and other delinquent behavior. The questionnaire consists of 29 questions that assess the youth's destructive and violent behavior toward others in the community and contact with law enforcement, including involvement with criminal offenses, arrests, and probation.

Analysis of 149 completed DS–Rs submitted by communities initially funded

in 2002–2003 revealed high internal consistency on DS–R items measuring the frequency and type of delinquent behavior in the past 6 months (Cronbach's alpha = .86).

### ***Education Questionnaire–Revised (EQ–R)***

The EQ–R was developed to collect, from caregivers, information on their child's educational status. The EQ–R contains 15 questions with subparts covering topics including school attendance, grade level, school achievement, alternative or special school and classroom placements, and reasons for having an Individualized Education Plan (IEP). Additional questions also provide information on overall academic performance and whether the child has been suspended or expelled from school.

As a method for collecting descriptive information, conventional assessments of reliability and validity are not appropriate for the EQ–R. However, review and refinement of the measure were conducted for communities initially funded in 2002–2004 and 2005–2006, building on the questionnaire used in the evaluation with communities initially funded in 1993–1994, 1997–1998, and 1999–2000, and feedback from grant communities.

### ***Family Life Questionnaire (FLQ)***

The FLQ consists of 10 statements about activities the family may do together and how the family interacts. This questionnaire was designed to assess aspects of family life that may change as a result of changes in children's functional impairment.

Preliminary analysis of national evaluation data from communities initially funded in 2002–2003 revealed high internal consistency (Cronbach's alpha = .85). Further, subscales of the CGSQ were found to correlate negatively with the FLQ items

as expected, suggesting the measure has discriminant validity.

### ***GAIN Quick–R: Substance Problem Scale (GAIN)***

The GAIN “documents participant-reported problems associated with the use and abuse of and dependence on drugs and alcohol” (Titus & Dennis, 2005, p. 11). This questionnaire is drawn from the Global Appraisal of Individual Needs–Quick (GAIN–Q, [http://www.chestnut.org/LI/gain/GAIN\\_Q/index.html](http://www.chestnut.org/LI/gain/GAIN_Q/index.html)). There is one screener item and 16 core items. Youth are asked to respond *no* or *yes* to each item. The 16 core items parallel those used to obtain a *DSM–IV* diagnosis of substance use. Although typically used to assess issues present during the past 12 months, the GAIN assesses issues that occurred in the past 6 months, the timeframe used throughout the national evaluation.

The overall alpha coefficient reported by Titus and Dennis (2005) for the 16 core items of the GAIN for adolescents (using a 12-month timeframe) is .82. Two subscales result from the 16 core GAIN items: the nine-item Substance Use and Abuse Index (SAUI–9) and the seven-item Substance Dependence Index (SDI–7). The alpha coefficients for these indices are .63 and .75, respectively.

### ***Living Situations Questionnaire (LSQ)***

The Living Situations Questionnaire (LSQ) is a modified version of the Restrictiveness of Living Situations questionnaire (ROLES; Hawkins, Almeida, Fabry, & Reitz, 1992). The LSQ documents the physical setting in which the child or youth lived during a 6-month time period and with whom the child or youth was living in that setting. Information gathered from the LSQ can be used to create the same living situation

categories assessed in the ROLES, which was developed to operationalize and assess the restrictiveness of children’s living situations.

No formal reliability and validity information is available on the LSQ or the ROLES; however, expected relationships have been found between levels of restrictiveness, as assessed with the ROLES, and programmatic variables. The ROLES was used to document changes in the restrictiveness of placements over time as a quality assurance indicator for children in foster care (Thomlison, 1993) and as a process outcome for a therapeutic case management program for children with severe emotional disturbance (Yoe, Bruns, & Burchard, 1995).

### ***Multi-Sector Service Contacts–Revised (MSSC–R)***

The MSSC–R was developed to record caregivers’ reports of services used in multiple child-serving sectors. Development of the MSSC–R followed from previous efforts in the field of mental health services research to collect caregiver reports of service use. The MSSC–R provides standard descriptions of types of services, but the names of the services as well as the service settings should be customized for each site. The standard descriptions allow cross-site comparisons, and the use of local service and agency names, those familiar to caregivers, improves the reporting of service contacts. The MSSC–R captures the different locations a child and/or family may have received any of the services in the 6-month period prior to the interview and whether each of the locations was convenient to the child and/or family. In addition, for each specific service asked, the MSSC–R records how much of each service type was received and how well the service meets the needs of the child and/or family.

The MSSC–R also contains two questions related to the caregiver’s service experience.

Information from the MSSC–R will be compared to communities’ fiscal management information systems to check the accuracy with which services provided in the mental health sector are reported by caregivers. Based on reliability analysis of the national evaluation data collected from communities initially funded in 1997–1998, Cronbach’s alpha coefficient was .98 for the service items that asked about whether a child received a service in the previous 6 months.

### **Revised Children’s Manifest Anxiety Scale (RCMAS)**

The RCMAS (Reynolds & Richmond, 1978) assesses the level and nature of anxiety experienced by children and youth aged 6–19 years. It examines both the source and the cause of stress in a person’s life. The scale can also be used to identify the relationship between anxiety and performance in other aspects of the child’s or youth’s life. The RCMAS contains 37 items. Each item is a statement that embodies a feeling or action that reflects an aspect of anxiety. The instrument includes questions about what the youth worries about, how often the youth worries, and how the youth feels, physiologically, as a result of his/her worry. Youth respond to each description with either *yes* or *no*.

Internal consistency; long-term reliability; and concurrent, convergent, and divergent validity have been demonstrated. Reynolds and Richmond (1978) reported that the items on the RCMAS yield a Kuder-Richardson (KR) reliability estimate of .83, demonstrating internal consistency. A cross-validation assessment conducted with 167 middle- and high-school-age children yielded a KR reliability estimate of .85. Comparable internal consistency was also

demonstrated with kindergarten-age children. The measure has been shown to have high short-term (i.e., retesting at 1 and 5 weeks) test–retest reliability (Pearson correlations from .60 to .88, significant at  $p \leq .01$ ), and fairly high long-term (i.e., retest at 9 months) test–retest reliability ( $r = .68$ ).

The RCMAS is highly correlated with the trait measure of anxiety, STAIC ( $r = .85$ ,  $p \leq .05$ ). A study by Mattison, Bagnato, and Brubaker (1988) showed that the RCMAS is able to discriminate between children with a *DSM–III* anxiety disorder and other *DSM–III* psychiatric diagnoses.

### **Reynolds Adolescent Depression Scale–2nd Edition (RADS–2)**

The RADS–2 (Reynolds, 1986) measures adolescent depression and is comprised of four subscales: dysphoric mood, anhedonia/negative affect, negative self-evaluation, and somatic complaints. The RADS–2 contains 30 items that state a feeling. Youth rate how often each statement describes how they feel using a 4-point scale: (1) *almost never*, (2) *hardly ever*, (3) *sometimes*, and (4) *most of the time*. Questions include feelings of happiness, sadness, fear, anxiety, loneliness, anger, and love.

Validity of the RADS–2 has been examined with respect to content validity, criterion-related validity, construct validity (convergent, discriminant, and factorial), and clinical validity (Krefetz, Steer, Gulab, & Beck, 2002; Reynolds & Mazza, 1998). Reliability and validity studies included a school-based sample of over 9,000 adolescents and a clinical sample of 297 adolescents with *DSM–III–R* or *DSM–IV* diagnoses who were evaluated in both school and clinical settings. Reynolds (1986) examined the reliability and validity of the RADS–2 in a sample of 89 young adolescents from an inner-city school. The



study found an internal consistency reliability of .91 on the initial assessment and .93 for the retest. The test–retest reliability of the RADS–2 was .87. The RADS–2 was able to discriminate depressed and non-depressed adolescents, with a sensitivity rate of 89 percent and specificity of 90 percent, and an overall correct classification of 90 percent. Total scores for the RADS–2 have a correlation of .84 with the Beck Depression Inventory ( $p < .001$ ) and .76 with the Hamilton Depression Rating Scale.

### **Substance Use Survey–Revised (SUS–R)**

The SUS–R assesses youth’s report of their substance use for alcohol, tobacco, and other drugs. The first set of questions measures a youth’s alcohol use, including history and frequency of drinking behaviors, and cigarette use. The next set of questions focuses on the youth’s illegal substance use. Youth are asked whether they ever used the substance, how old they were when they first tried the substance, how long it has been since they last used the substance, and frequency of use during the past 30 days. The remaining questions assess youth’s use of prescription drugs without a physician’s prescription and abuse of nonprescription or over-the-counter drugs.

Conventional assessments of reliability and validity are not appropriate for the SUS–R.

### **Vineland Screener 0–Under 3 (VS1), 3–5 (VS2), 6–12 (VS3)**

The Vineland Screener (Sparrow et al., 1993) is a developmental assessment. There are multiple versions of the Vineland Screener, each targeting a narrow age range and including assessment items that are appropriate for the development of children within that age range. The national evaluation uses three versions of the

screeners: aged 0 to under 3 years (VS1), aged 3 to under 6 years (VS2), and aged 6 to under 12 years (VS3).

The VS1 and VS2 assess development within four domains: communication, daily living skills, socialization, and motor skills. Both of these screeners have 60 items (15 items per domain). The VS3 includes all of the domains that are in the VS1 and VS2 except for motor skills, and has a total of 45 items. For each item, the interviewer indicates how often the child does the behavior, with the scoring referring to the information probed for rather than the initial question. Scoring options include *Yes, usually; Sometimes, partially; No, never; No opportunity; and Don’t know.*

The Vineland normative data were obtained from a representative national sample matched to the 1980 census on the basis of gender, race/ethnicity, community size, region of the country, and parents’ educational level. This sample of 536 children was also used to derive the norms for the Vineland Screener (Canino, Costello, & Angold, 1999; Coll, Buckner, Brooks, Weinreb, & Bassuk, 1998).

The Vineland Screener is highly correlated with the in-depth Vineland Survey Form, with correlations of at least .89 (range: .87–.98) on each domain and the composite score. The instrument has inter-rater reliability of  $\alpha = .98$  among lay interviewers.

### **Youth Information Questionnaire (YIQ)**

The YIQ contains 25 items that capture a range of issues and information that are important for understanding many facets of the youth’s life. The YIQ includes questions about the youth’s acculturation, employment, peer relationships, presenting problems, suicidality, and neighborhood

safety. A subset of 18 YIQ items (i.e., those data elements that may change over time) will also be asked at each follow-up data collection point (e.g., 6 months, 12 months, 18 months, etc.).

As a method for collecting descriptive information, conventional assessments of reliability and validity are not appropriate for the YIQ. However, data collected with the YIQ will be compared to descriptive data provided by the caregivers to check for consistency.

### **Youth Services Survey (YSS)**

The YSS (Brunk et al., 2000) contains 21 items scored on a 5-point scale and one open-ended question. The measure assesses perceptions of service across five domains: access, participation in treatment, cultural sensitivity, satisfaction, and outcomes.

Based on reliability analysis of the State Indicator Pilot Project, which evaluated data from Colorado, Kentucky, Oklahoma, Texas, Virginia, and the District of Columbia, Cronbach's alpha for the domain measuring access to services is .705, participation in treatment is .823, cultural sensitivity of staff is .896, satisfaction with services is .941, and perceived outcome of service is .864.

### **Youth Services Survey for Families (YSS-F)**

The YSS-F (Brunk et al., 2000) contains 21 items scored on a 5-point scale and one open-ended question. The measure assesses perceptions of service across five domains: access, participation in treatment, cultural sensitivity, satisfaction, and outcomes.

Based on reliability analysis of the State Indicator Pilot Project, which evaluated data from Colorado, Kentucky, Oklahoma, Texas, Virginia, and the District of

Columbia, Cronbach's alpha for the domain measuring access to services is .725, participation in treatment is .772, cultural sensitivity of staff is .907, satisfaction with services is .943, and perceived outcome of service is .905.

### **Sustainability Survey**

The Sustainability Survey was developed to collect data from graduated sites (postgrant) and sites nearing graduation (including the period when grant funding is diminished). To reduce response burden and to facilitate data collection, the survey is Web based, and after pilot testing and revision, was first launched in 2003.

The survey is comprised of six sections, including questions about the demographics of the respondent's agency/organization and his or her role and length of involvement with the system of care community, and a budget worksheet that only project directors complete. Most questions are in two parts, assessing whether the idea or element was present during different timeframes and to what degree it was effective, using either a 4- (from 1 to 4, where 4 is the highest) or 5-point scale (where 5 is the highest.) The survey items are designed to compare the status of system of care elements—services, principles, goals, maintenance factors, general strategies, and financing strategies—during the grant-funded period (described as anytime during the grant period prior to the previous 12 months) and during the current period (defined as the previous 12 months). Ratings allow for an assessment of positive or negative changes in status that occurred for each element or section, particularly with the end of the Federal grant-funding period.

The survey is available in English and Spanish. Respondents are provided with instruction and technical assistance and can complete the survey in multiple sittings over

the moderate amount of time provided during the data collection period.

## System of Care Assessment

The system of care assessment is guided by a conceptual framework that describes generic components of any service delivery system and rates each component on how well system of care principles are manifest. The framework is organized into a table with two domains that each contains four service system components that form the

columns of the table. The domains are infrastructure and service delivery. The infrastructure domain is comprised of four components that address governance, management and operations, service array, and evaluation and quality monitoring. The service delivery domain is comprised of four components that address entry into services, service planning, service provision, and case review. Definitions of the components are provided in Table D-1.

**Table D-1: Definition of Service System Components**

Infrastructure	
<b>Governance</b>	The governing structure responsible for explicating the system’s goals, vision, and mission; strategic planning and policy development; and establishing formal arrangements among agencies. Governance structures may be boards of directors, oversight or steering committees, interagency boards, or management teams.
<b>Management and Operations</b>	The administrative functions and activities that support direct service delivery. For this study, this component focuses primarily on staff development, funding approaches, and procedural mechanisms related to the implementation of the system of care service delivery system.
<b>Service Array</b>	The range of service and support options available to children and their families across the system of care.
<b>Quality Monitoring</b>	Quality management conducted by the system that tracks the integration of process assessment and outcome measurement, and the use of continuous feedback loops to improve service delivery.
Service Delivery	
<b>Entry into Service System</b>	The processes and activities associated with children and families’ initial contact with the service system, including eligibility determination.
<b>Service Planning</b>	The identification of services for children and families through initial development as well as periodic updating of initial service plans.
<b>Service Provision</b>	The processes and activities related to the ongoing receipt of and participation in services.
<b>Case Review Structure</b>	The process used to review the care of children at risk of out-of-home or out-of-community placement. For those already in such placements, there may be routine monitoring to determine whether that setting is still appropriate, or to plan transition to services in the community or back to the home. This process may also include review of challenging cases to resolve difficult problems that could not be resolved by other means. Key to the case review process is that the persons involved have the authority to make service decisions, including transitions to and from restrictive or out-of-community placements.

The rows of the framework table are comprised of eight system of care principles: family focused, individualized, culturally competent, interagency, collaborative and

coordinated, accessible, community based, and least restrictive. Definitions of the system of care principles are provided in Table D-2.

**Table D-2: Definition of System of Care Principles**

<b>Principle</b>	<b>Definition</b>
<b>Family Focused (Grant Communities Initially Funded in 2002–2004)</b>	The recognition that (a) the ecological context of the family is central to the care of all children, (b) families are important contributors to and equal partners in any effort to serve children, and (c) all system and service processes should be planned to maximize family involvement.
<b>Family Focused (Grant Communities Initially Funded in 2005–2006)</b>	The recognition that (a) the ecological context of the family is central to the care of all children, (b) families are primary decision makers and equal partners in all efforts to serve children, and (c) all system and service processes should be planned to maximize family involvement and decision making.
<b>Individualized (Grant Communities Initially Funded in 2002–2004)</b>	The provision of care that is expressly child centered, addresses child-specific needs, and recognizes and incorporates child-specific strengths.
<b>Individualized/Youth Guided (Grant Communities Initially Funded in 2005–2006)</b>	The provision of care that is expressly child- and youth-centered, that addresses the child or youth’s specific needs, and that recognizes and incorporates the child or youth’s strengths; and the recognition that young people have a right to be empowered, educated, and given the opportunity to make decisions about their own care, and about the policies and procedures governing the care of all youth.
<b>Culturally Competent</b>	Sensitivity and responsiveness to, and acknowledgment of, the inherent value of differences related to race, religion, language, national origin, gender, socioeconomic background, and community-specific characteristics.
<b>Interagency</b>	The involvement and partnership of core agencies in multiple child-serving sectors, including child welfare, health, juvenile justice, education, and mental health.
<b>Collaborative/ Coordinated</b>	Professionals working together in a complementary manner to avoid duplication of services, eliminate gaps in care, and facilitate child and family movement through the service system.
<b>Accessible</b>	The minimizing of barriers to services in terms of physical location, convenience of scheduling, and financial constraints.
<b>Community Based</b>	The provision of services within close geographical proximity to the targeted community.
<b>Least Restrictive</b>	The provision of services in settings that maximize freedom of choice and movement, and that present opportunities to interact in normative environments (e.g., school and family).

The intersection of these organizational aspects and system of care principles form the assessment framework. Each component within the two domains (infrastructure and service delivery) is rated on the extent to which it manifests system of care principles. Each cell in the framework contains indicators or measures of system performance that are linked to a series of questions asked of respondents during semistructured interviews described below. The indicators upon which the ratings are based are included in each cell of the framework. For example, for the cell in which governance and family focused intersect, questions are asked about three distinct indicators to address the general question, “To what extent is system governance conducted in a family-focused way?”

### Reliability and Validity

Inter-rater reliability (i.e., reduced variation across raters) is assured by explicitly defined rating criteria for each item. Site visitors participate in a 3-day training session to learn how to apply the criteria in a standard fashion. Each site visitor is required to achieve 85 percent agreement with accurate ratings for 25 hypothetical scripts. Additionally, reliability testing and refresher training sessions are conducted annually to

ensure continued reliability among site visitors.

### Data Analysis Methods

The quantitative data are determined from items linked to framework indicators. Site visitors rate these items on a 5-point scale, with 1 being the lowest and 5 the highest possible rating. For each interview, items are rated using only information reported by that specific informant and are based on standard criteria. Mean ratings are derived from ratings of the system of care assessment protocols. This information reveals how systems of care develop or are developing vis-à-vis system of care principles.

The qualitative data are derived from a narrative report that organizes and describes all information obtained from the community. The report includes a summary of service component areas, as well as a brief and preliminary synopsis of observed salient strengths and challenges. The report is entered into the *Atlas.ti* qualitative analysis software that organizes and classifies all information. The data are analyzed according to a set of defined codes that are assigned to segments of the text. The codes are identified a priori, and represent components of the system of care service structure.

## Appendix E

### Performance Measurement

#### GPRC Program Indicators for FY 2009

GPRC Program Indicators	Actual Performance
1. Increase in number of children receiving services FY 2009 Target: 13,051	10,762
2. Increase in percentage of children attending school 75% or more of time after 12 months FY 2009 Target: 86.3%	89.2%
3. Increase in percentage of children with no law enforcement contacts at 6 months FY 2009 Target: 71.7%	69.5%
4. Decrease average number of days in inpatient facilities among children served in systems of care at 6 months FY 2009 Target: -2.00 days	-0.12 days
5. Decrease in inpatient care costs per 1,000 children served FY 2009 Target: \$2,376,000	\$160,000



## CQI Progress Report—Aggregate for Communities Initially Funded in 2002–2004

### COMPREHENSIVE COMMUNITY MENTAL HEALTH SERVICES FOR CHILDREN AND THEIR FAMILIES PROGRAM CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRESS REPORT National Aggregate, July 2009

**Date Services Started: Oct-03**

**Number Enrolled in the Descriptive Study: 18177**

**Number Enrolled in the Outcome Study: 4721**

	ACTUALS		CHANGE		INDEX		
	Performance Mark <sup>1</sup>	Raw Score	Previous Raw Score	Change from Previous Report	Benchmark <sup>2</sup>	Max Points	Actual Points
<b>TOTAL SITE SCORE</b>						<b>100.00</b>	<b>82.53</b>
<b>System-Level Outcomes</b>							
<b>Service Accessibility</b>							
1. Number of Children Served (with descriptive data)		17,475	16,295	↑	n/a	.	.
2. Linguistic Competency Rate		91.0%	91.0%	↑	91.7%	n/a	0.00
3. Agency Involvement Rate—Service Provision		74.8%	75.1%	↓	92.9%	3.50	2.82
4. Caregiver Satisfaction Rate—Access to Services		4.24	4.24	↑	4.42	3.67	3.52
5. Timeliness of Services (average days)*		15.42	15.72	↓	10.18	1.36	0.90
<b>Service Quality</b>							
6. Agency Involvement Rate—Treatment Planning		30.1%	30.6%	↓	64.1%	3.00	1.41
7. Informal Supports Rate		34.9%	36.1%	↓	51.4%	1.55	1.05
8. Caregiver Satisfaction Rate—Quality of Services		4.02	4.02	↑	4.13	3.94	3.83
9. Youth Satisfaction Rate—Quality of Services		3.92	3.92	↓	4.02	3.83	3.73
10. Caregiver Satisfaction Rate—Outcomes		3.52	3.52	↓	3.61	3.86	3.77
11. Youth Satisfaction Rate—Outcomes		3.86	3.86	↓	3.92	4.04	3.98
<b>Service Appropriateness</b>							
12. Individualized Education Plan (IEP) Development (% at 6 mos) <sup>3,4</sup>		54.2%	54.2%	↓	55.9%	n/a	n/a
13. Substance Use Treatment Rate		59.0%	60.0%	↓	67.8%	3.25	2.83
<b>System-Level Outcomes Subtotal</b>						<b>32.00</b>	<b>27.83</b>
<b>Child and Family Outcomes</b>							
<b>Caregiver Report</b>							
<b>Child Level</b>							
14a. School Enrollment Rate <sup>3</sup>		95.6%	95.6%	↓	97.8%	n/a	n/a
14b. School Enrollment Rate (Preschool)		95.9%	95.8%	↑	n/a	n/a	n/a
15a. School Attendance Rate (80% of the time)		79.5%	79.3%	↑	84.4%	3.68	3.47
15b. Daycare or Afterschool Attendance Rate		73.6%	73.9%	↑	n/a	n/a	n/a
16. School Performance Improvement Rate (intake to 6 mos)		36.3%	36.0%	↑	39.8%	2.20	2.01
17. Stability in Living Situation Rate (intake to 6 mos)		77.4%	77.6%	↓	86.2%	2.85	2.56
18. Inpatient Hospitalization Days per Youth (intake to 6 mos)*		4.83	4.94	↑	0.78	2.75	0.44
19. Suicide Attempt Reduction Rate—Caregiver Report**		-40.7%	-42.8%	↓	-43.8%	3.90	3.63
20a. Emotional and Behavioral Problem Improvement Rate—Ages 6–18 Years (intake to 6 mos)		29.2%	28.9%	↑	35.0%	3.27	2.73
20b. Emotional and Behavioral Problem Improvement Rate—Ages 1½–5 Years (intake to 6 mos)		31.5%	37.0%	↓	n/a	n/a	n/a



## CQI Progress Report—Aggregate for Communities Initially Funded in 2002–2004 (continued)

### COMPREHENSIVE COMMUNITY MENTAL HEALTH SERVICES FOR CHILDREN AND THEIR FAMILIES PROGRAM CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRESS REPORT National Aggregate, July 2009

**Date Services Started: Oct-03**

**Number Enrolled in the Descriptive Study: 18177**

**Number Enrolled in the Outcome Study: 4721**

	ACTUALS		CHANGE		INDEX		
	Performance Mark <sup>1</sup>	Raw Score	Previous Raw Score	Change from Previous Report	Benchmark <sup>2</sup>	Max Points	Actual Points
<b>Family Level</b>							
21. Average Reduction in Employment Days Lost (intake to 6 mos)*		-2.35	-2.32	↑	-3.98	3.58	2.11
22. Family Functioning Improvement Rate (intake to 6 mos)		3.6%	3.5%	↓	5.8%	3.32	2.07
23. Caregiver Strain Improvement Rate (intake to 6 mos)		29.0%	28.7%	↓	33.8%	3.34	2.87
<b>Youth Report</b>							
24. Youth No Arrest Rate (intake to 6 mos)		7.4%	7.9%	↓	21.0%	3.78	1.33
25. Suicide Attempt Reduction Rate—Youth Report (intake to 6 mos)**		-50.0%	-51.3%	↑	-100.0%	3.74	1.87
26. Anxiety Improvement Rate (intake to 6 mos)		17.5%	16.7%	↑	12.6%	2.95	2.95
27. Depression Improvement Rate (intake to 6 mos)		14.2%	14.1%	↑	22.9%	2.64	1.64
<b>Child and Family Outcomes Subtotal</b>						42.00	29.67
<b>Satisfaction of Services</b>							
28. Caregiver Overall Satisfaction		4.04	4.09	↓	4.09	3.00	2.96
29. Youth Overall Satisfaction		3.92	3.92	↓	3.98	3.00	2.96
<b>Satisfaction with Services Subtotal</b>						6.00	5.92
<b>Family and Youth Involvement</b>							
30. Caregiver Satisfaction Rate—Participation		4.16	4.16	↑	4.30	3.06	2.96
31. Youth Satisfaction Rate—Participation		3.62	3.62	↓	3.72	2.98	2.90
32. Caregiver and Other Family Involvement in Service Plan		92.1%	92.3%	↑	100.0%	3.97	3.66
33. Youth Involvement in Service Plan		84.1%	84.0%	↑	89.7%	3.99	3.74
<b>Family and Youth Involvement Subtotal</b>						14.00	13.26
<b>Cultural and Linguistic Competency</b>							
34. Caregiver Satisfaction Rate—Cultural Competency		4.46	4.47	↓	4.61	3.00	2.90
35. Youth Satisfaction Rate—Cultural Competency		4.26	4.25	↓	4.31	3.00	2.96
<b>Cultural Competency Subtotal</b>						6.00	5.87
<b>Evidence-based Practice (to be developed)</b>		TBD			TBD	TBD	
<b>Evidence-based Practice Subtotal</b>							

<sup>1</sup> Performance marks are not reported for the aggregate report.

<sup>2</sup> The benchmark represents the 75th percentile score from the April 2006 CQI Progress Report.

<sup>3</sup> Indicator reported for information purposes only and was not included in the PCA. Therefore, raw score does not contribute to the domain score.

<sup>4</sup> The calculation was modified on the Dec 2006 report to reflect % of cases with an IEP at 6 mos and should be interpreted locally.

\* For these indicators, smaller average days represent positive outcomes. The smaller the raw score the better the outcome.

\*\* For these indicators, a negative raw score represents a positive outcome. The more negative the raw score the better the outcome.

## CQI Progress Report—Aggregate for Communities Initially Funded in 2002–2004 (continued)

Number Table & Standard Deviation Table				
National Aggregate, July 2009				
CQI Progress Report Indicator	National*	# of Sites**	National std dev	Data Source
1. Number of children served (with descriptive data)	17,475	29	640.96	EDIF***
2. Linguistic Competency Rate	312	11	0.06	Caregiver
3. Agency Involvement Rate—Service Provision	2,883	26	0.13	Caregiver
4. Caregiver Satisfaction Rate—Access to Services	2768	26	0.26	Caregiver
5. Timeliness of Services (average days)	12,173	28	10.51	EDIF***
6. Agency Involvement Rate—Treatment Planning	10,358	29	0.26	EDIF***
7. Informal Supports Rate	2,870	26	0.18	Caregiver
8. Caregiver Satisfaction Rate—Quality of Services	2,769	26	0.30	Caregiver
9. Youth Satisfaction Rate—Quality of Services	1,664	23	0.17	Youth
10. Caregiver Satisfaction Rate—Outcomes	2,760	26	0.31	Caregiver
11. Youth Satisfaction Rate—Outcomes	1,663	23	0.15	Youth
12. Individualized Education Plan (IEP) Development (% at 6 mos)	2,430	26	0.17	Caregiver
13. Substance Use Treatment Rate	273	12	0.18	Caregiver
14a. School Enrollment Rate	3,122	26	0.04	Caregiver
14b. School Enrollment Rate (Preschool)	121	2	0.03	Caregiver
15a. School Attendance Rate (80% of the time)	2,769	26	0.07	Caregiver
15b. Daycare or Afterschool Attendance Rate	489	18	0.11	Caregiver
16. School Performance Improvement Rate (intake to 6 mos)	1,903	24	0.09	Caregiver
17. Stability in Living Situation Rate (intake to 6 mos)	3,150	26	0.13	Caregiver
18. Inpatient Hospitalization Days per Youth (intake to 6 mos)	3,147	22	9.56	Caregiver
19. Suicide Attempt Reduction Rate—Caregiver Report	3,024	17	1.34	Caregiver
20a. Emotional and Behavioral Problem Improvement Rate—Ages 6–18 Years (intake to 6 mos)	2,702	25	0.10	Caregiver
20b. Emotional and Behavioral Problem Improvement Rate—Ages 1½–5 Years (intake to 6 mos)	200	3	0.06	Caregiver
21. Average Reduction in Employment Days Lost (intake to 6 mos)	1,340	23	2.37	Caregiver
22. Family Functioning Improvement Rate (intake to 6 mos)	3,069	26	0.04	Caregiver
23. Caregiver Strain Improvement Rate (intake to 6 mos)	2,994	26	0.06	Caregiver
24. Youth No Arrest Rate (intake to 6 mos)	1,695	23	0.13	Youth
25. Suicide Attempt Reduction Rate—Youth Report (intake to 6 mos)	1,696	13	0.29	Youth
26. Anxiety Improvement Rate (intake to 6 mos)	1,687	23	0.04	Youth
27. Depression Improvement Rate (intake to 6 mos)	1,698	23	0.05	Youth
28. Caregiver Overall Satisfaction	2,768	26	0.36	Caregiver
29. Youth Overall Satisfaction	1,663	23	0.15	Youth
30. Caregiver Satisfaction Rate—Participation	2,768	26	0.27	Caregiver
31. Youth Satisfaction Rate—Participation	1,665	23	0.24	Youth
32. Caregiver and Other Family Involvement in Service Plan	10,475	29	0.10	EDIF***
33. Youth Involvement in Service Plan	6,721	27	0.16	EDIF***
34. Caregiver Satisfaction Rate—Cultural Competency	2,717	26	0.17	Caregiver
35. Youth Satisfaction Rate—Cultural Competency	1,639	23	0.16	Youth

\* Number of cases per indicator at the national level, i.e., across all cases in the national evaluation dataset.

\*\* Number of sites (among 27 in cohort) with a raw score reported, i.e., complete data to generate the indicator.

\*\*\* The sources of information used to complete the EDIF include caregiver, staff-as-caregiver, youth, and case record review.

## CQI Progress Report—Aggregate for Communities Initially Funded in 2005–2006

*Comprehensive Community Mental Health Services for Children and Their Families Program*  
**CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRESS REPORT**  
 National Aggregate Report for Grant Communities Funded in 2005 and 2006, August 31, 2009

**Date Services Started: Aug-06**  
**Number Enrolled in the Descriptive Study: 6,980**  
**Number Enrolled in the Outcome Study: 3,032**

	Change from Previous Report <sup>1</sup>	Previous Cumulative Raw Score	Current Cumulative Raw Score	Performance Mark <sup>2</sup>	Current Period Raw Score	Benchmark <sup>3</sup>	How to Interpret Raw Score
<b>System-Level Outcomes</b>							
<b>Service Accessibility</b>							
1. Number of Children Served (with descriptive data)	Score Improved	5,665	6,731		1,090	n/a	Community defined
2. Linguistic Competency Rate	Score Improved	83.3%	86.3%		95.7%	94.7%	Closer to 100% better
3. Agency Involvement Rate—Service Provision	Score Worsened	77.8%	77.5%		76.6%	85.9%	Closer to 100% better
4. Caregiver Satisfaction Rate—Access to Services	Score Improved	4.22	4.25		4.42	4.38	Closer to 5 better
5. Timeliness of Services (average days)*	Score Worsened	16.16	16.51		18.61	6.00	Lower # better
<b>Service Quality</b>							
6. Agency Involvement Rate—Treatment Planning	Score Worsened	36.5%	35.4%		29.7%	54.6%	Closer to 100% better
7. Informal Supports Rate	Score Worsened	43.3%	42.9%		41.7%	51.8%	Closer to 100% better
8. Caregiver Satisfaction Rate—Quality of Services	Score Improved	3.99	4.02		4.15	4.18	Closer to 5 better
9. Youth Satisfaction Rate—Quality of Services	Score Improved	3.88	3.91		4.06	4.02	Closer to 5 better
10. Caregiver Satisfaction Rate—Outcomes	Score Improved	3.51	3.55		3.68	3.77	Closer to 5 better
11. Youth Satisfaction Rate—Outcomes	Score Improved	3.82	3.84		3.94	3.97	Closer to 5 better
<b>Service Appropriateness</b>							
12. Individualized Education Plan (IEP) Development (% at 6 mos)	No Change	58.6%	58.6%		58.4%	67.2%	Community defined
13. Substance Use Treatment Rate	Score Worsened	59.2%	57.1%		40.0%	73.1%	Closer to 100% better
<b>Child and Family Outcomes</b>							
<b>Caregiver Report</b>							
<b>Child Level</b>							
14a. School Enrollment Rate	Score Improved	95.3%	95.7%		97.5%	99.8%	Closer to 100% better
14b. School Enrollment Rate (Preschool)	Score Improved	95.0%	96.7%		100.0%	100.0%	Closer to 100% better
15a. School Attendance Rate (80% of the time)	Score Improved	79.2%	79.9%		83.6%	87.2%	Closer to 100% better
15b. Daycare or Afterschool Care Program Attendance Rate	Score Improved	79.1%	79.3%		80.9%	81.4%	Closer to 100% better
16. School Performance Improvement Rate (intake to 6 mos)	Score Worsened	35.0%	34.0%		29.1%	39.1%	Closer to 100% better
17. Stability in Living Situation Rate (intake to 6 mos)	Score Improved	77.0%	78.8%		86.6%	84.7%	Closer to 100% better
18. Inpatient Hospitalization Days per Child (intake to 6 mos)*	Score Improved	3.31	2.69		6.25	0.80	Lower # better
19. Suicide Attempt Reduction Rate—Caregiver Report**	Score Worsened	-38.6%	-33.8%		0.0%	-50.0%	More negative % better
20a. Emotional and Behavioral Problem Improvement Rate—Age 6–18 (intake to 6 mos)	No Change	27.0%	27.0%		26.8%	33.6%	Closer to 100% better
20b. Emotional and Behavioral Problem Improvement Rate—Age 1½–5 (intake to 6 mos)	Score Worsened	30.1%	29.3%		24.6%	35.6%	Closer to 100% better
20c. Socialization or Communication Problem Improvement Rate (intake to 6 mos)	Score Worsened	25.4%	24.9%		22.1%	33.5%	Closer to 100% better

## CQI Progress Report—Aggregate for Communities Initially Funded in 2005–2006 (continued)

*Comprehensive Community Mental Health Services for Children and Their Families Program*  
**CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRESS REPORT**  
 National Aggregate Report for Grant Communities Funded in 2005 and 2006, August 31, 2009

**Date Services Started: Aug-06**  
**Number Enrolled in the Descriptive Study: 6,980**  
**Number Enrolled in the Outcome Study: 3,032**

	Change from Previous Report <sup>1</sup>	Previous Cumulative Raw Score	Current Cumulative Raw Score	Performance Mark <sup>2</sup>	Current Period Raw Score	Benchmark <sup>3</sup>	How to Interpret Raw Score
<b>Child and Family Outcomes (continued)</b>							
<b>Caregiver Report (continued)</b>							
<b>Family Level</b>							
21. Average Reduction in Employment Days Lost (intake to 6 mos)**	Score Worsened	-1.32	-1.25		-0.86	-2.92	More negative % better
22. Family Functioning Improvement Rate (intake to 6 mos)	Score Worsened	3.1%	2.9%		1.9%	5.7%	Higher % better
23. Caregiver Strain Improvement Rate (intake to 6 mos)	Score Improved	24.4%	24.9%		26.9%	32.1%	Closer to 100% better
<b>Youth Report</b>							
24. Youth No Arrest Rate (intake to 6 mos)	Score Worsened	6.1%	5.8%		3.6%	17.6%	Higher % better
25. Suicide Attempt Reduction Rate—Youth Report (intake to 6 mos)**	Score Improved	-24.4%	-24.5%		-25.0%	-50.0%	More negative % better
26. Anxiety Improvement Rate (intake to 6 mos)	Score Improved	13.6%	15.8%		23.2%	18.5%	Closer to 100% better
27. Depression Improvement Rate (intake to 6 mos)	Score Improved	9.7%	10.5%		16.3%	14.3%	Closer to 100% better
<b>Satisfaction with Services</b>							
28. Caregiver Overall Satisfaction	Score Improved	3.99	4.02		4.15	4.16	Closer to 5 better
29. Youth Overall Satisfaction	Score Improved	3.90	3.93		4.05	4.00	Closer to 5 better
<b>Family and Youth Involvement</b>							
30. Caregiver Satisfaction Rate—Participation	Score Improved	4.23	4.26		4.41	4.30	Closer to 5 better
31. Youth Satisfaction Rate—Participation	Score Improved	3.65	3.67		3.79	3.73	Closer to 5 better
32. Caregiver and Other Family Involvement in Service Plan	Score Improved	96.8%	97.0%		97.9%	99.4%	Closer to 100% better
33. Youth Involvement in Service Plan	Score Improved	89.4%	89.7%		91.1%	94.8%	Closer to 100% better
<b>Cultural and Linguistic Competency</b>							
34. Caregiver Satisfaction Rate—Cultural Competency	Score Improved	4.44	4.46		4.51	4.56	Closer to 5 better
35. Youth Satisfaction Rate—Cultural Competency	Score Improved	4.24	4.26		4.37	4.37	Closer to 5 better

<sup>1</sup> The change from previous report is reported as Score Worsened, No Change, or Score Improved.

<sup>2</sup> Performance marks are not reported in the aggregate report.

<sup>3</sup> The benchmark represents the 75th percentile score across all Phase IV and Phase V communities as of April 11, 2009.

\* For these indicators, smaller average days represent positive outcomes. The smaller the raw score the better the outcome.

\*\* For these indicators, a negative raw score represents a positive outcome. The more negative the raw score the better the outcome.

## CQI Progress Report—Aggregate for Communities Initially Funded in 2005–2006 (continued)

Number and Standard Deviation Table for CQI Progress Report Indicators					
CQI Progress Report Indicator	Cumulative Number of Cases at National Level*	Number of Sites with Complete Data to Calculate Indicator	Cumulative National Standard Deviation	Number of Cases at National Level for Current Period*	Data Source
1. Number of children served (with descriptive data)	6,731	30	171.95	1,090	EDIF**
2. Linguistic Competency Rate	95	4	0.19	23	Caregiver
3. Agency Involvement Rate—Service Provision	1,464	29	0.15	252	Caregiver
4. Caregiver Satisfaction Rate—Access to Services	1,369	28	0.24	247	Caregiver
5. Timeliness of Services (average days)	5,497	29	14.64	849	EDIF**
6. Agency Involvement Rate—Treatment Planning	4,970	30	0.22	804	EDIF**
7. Informal Supports Rate	1,458	29	0.20	252	Caregiver
8. Caregiver Satisfaction Rate—Quality of Services	1,373	28	0.29	248	Caregiver
9. Youth Satisfaction Rate—Quality of Services	714	21	0.29	102	Youth
10. Caregiver Satisfaction Rate—Outcomes	1,368	28	0.32	248	Caregiver
11. Youth Satisfaction Rate—Outcomes	712	21	0.27	103	Youth
12. Increase in Individualized Education Plan (IEP) Development (intake to 6 mos)	1,175	27	0.16	202	Caregiver
13. Substance Use Treatment Rate	140	4	0.17	15	Caregiver
14a. School Enrollment Rate	1,490	29	0.07	240	Caregiver
14b. School Enrollment Rate (Preschool)	150	5	0.03	32	Caregiver
15a. School Attendance Rate (80% of the time)	1,342	29	0.11	219	Caregiver
15b. Daycare or Afterschool Care Program Attendance Rate	285	9	0.12	47	Caregiver
16. School Performance Improvement Rate (intake to 6 mos)	746	21	0.11	117	Caregiver
17. Stability in Living Situation Rate (intake to 6 mos)	1,549	29	0.14	261	Caregiver
18. Inpatient Hospitalization Days per Child (intake to 6 mos)	1,549	29	4.14	264	Caregiver
19. Suicide Attempt Reduction Rate—Caregiver Report	1,520	17	0.93	257	Caregiver
20a. Emotional and Behavioral Problem Improvement Rate—Age 6–18 (intake to 6 mos)	1,183	26	0.08	179	Caregiver
20b. Emotional and Behavioral Problem Improvement Rate—Age 1½–5 (intake to 6 mos)	287	5	0.08	61	Caregiver
20c. Socialization or Communication Problem Improvement Rate (intake to 6 mos)	309	6	0.05	68	Caregiver
21. Average Reduction in Employment Days Lost (intake to 6 mos)	697	23	1.80	118	Caregiver
22. Family Functioning Improvement Rate (intake to 6 mos)	1,522	29	0.03	255	Caregiver
23. Caregiver Strain Improvement Rate (intake to 6 mos)	1,508	29	0.09	253	Caregiver
24. Youth No Arrest Rate (intake to 6 mos)	754	21	0.22	99	Youth
25. Suicide Attempt Reduction Rate—Youth Report (intake to 6 mos)	748	19	0.65	105	Youth
26. Anxiety Improvement Rate (intake to 6 mos)	735	22	0.11	125	Youth
27. Depression Improvement Rate (intake to 6 mos)	749	22	0.06	98	Youth
28. Caregiver Overall Satisfaction	1,373	28	0.22	248	Caregiver
29. Youth Overall Satisfaction	712	21	0.24	102	Youth
30. Caregiver Satisfaction Rate—Participation	1,372	28	0.18	247	Caregiver
31. Youth Satisfaction Rate—Participation	711	21	0.32	102	Youth
32. Caregiver and Other Family Involvement in Service Plan	5,113	30	0.06	802	EDIF**
33. Youth Involvement in Service Plan	3,110	24	0.18	459	EDIF**
34. Caregiver Satisfaction Rate—Cultural Competency	1,331	28	0.16	245	Caregiver
35. Youth Satisfaction Rate—Cultural Competency	697	20	0.21	100	Youth

\* Numbers reported as "0" represent fewer than 10 cases.

\*\* The sources of information used to complete the EDIF include caregiver, staff-as-caregiver, youth, and case record review.

## Appendix F

### Descriptive and Outcomes Data Tables

#### Methods and Study Sample

The Longitudinal Child and Family Outcome Study of grant communities assessed children and their families every 6 months for up to 36 months, regardless of whether the children continued to receive services through system of care programs. This allowed comparison of clinical and functional outcomes for all children and youth who participated in the Outcome Study, regardless of whether they remained in or exited system of care services. These figures may vary slightly for communities funded to serve smaller numbers of children (e.g., funding in some communities may be directed primarily toward infrastructure

development, or the number of children meeting service criteria for serious emotional disturbance may be lower). While in most grant communities all willing families need to be recruited into the Outcome Study, in some larger communities, sampling strategies may need to be employed to select a sufficient number of families at random from the pool of children who enter the system of care program. Sample size in analyses conducted in this report fluctuates due to differences in enrollment and data completion rates across grant communities. Table F-1 presents study enrollment and data completion rates through August 2009 for each community initially funded in 2002–2006.

**Table F-1: Study Enrollment and Program Interview Completion for Grant Communities Initially Funded in 2002–2006 as of August 2009**

Community	Descriptive Sample <sup>a</sup>	Outcome Sample <sup>b</sup>	Eligible for Interview at Each Assessment Point <sup>c</sup>						Completed Interview at Each Assessment Point <sup>d</sup>						Interview Completion Rate at Each Assessment Point					
			6-Month	12-Month	18-Month	24-Month	30-Month	36-Month	6-Month	12-Month	18-Month	24-Month	30-Month	36-Month	6-Month	12-Month	18-Month	24-Month	30-Month	36-Month
55	52	4	4	2	2	2			1	1	1	0			25.0%	50.0%	50.0%	0.0%		
56	340	114	114	111	98	82	59	45	78	52	31	21	15	7	68.4%	46.8%	31.6%	25.6%	25.4%	15.6%
57	3,189	225	203	176	138	83	53	23	124	83	61	37	8	0	61.1%	47.2%	44.2%	44.6%	15.1%	0.0%
58	392	110	110	110	100	85	70	56	104	101	92	83	68	55	94.5%	91.8%	92.0%	97.6%	97.1%	98.2%
59	72	25	25	25	25	25	14	4	12	0	0	0	0	0	48.0%	0.0%	0.0%	0.0%	0.0%	0.0%
60	660	113	91	70	65	51	33	21	58	37	39	26	18	13	63.7%	52.9%	60.0%	51.0%	54.5%	61.9%
61	505	171	154	117	80	60	41	14	112	83	53	39	24	7	72.7%	70.9%	66.3%	65.0%	58.5%	50.0%
62	287	186	176	151	132	111	91	55	140	119	106	77	59	41	79.5%	78.8%	80.3%	69.4%	64.8%	74.5%
63	362	0																		
64	481	261	261	253	240	217	190	142	188	148	110	93	65	45	72.0%	58.5%	45.8%	42.9%	34.2%	31.7%
65	356	168	160	148	127	108	86	64	129	111	93	75	46	31	80.6%	75.0%	73.2%	69.4%	53.5%	48.4%
66	323	102	101	92	84	75	49	32	40	21	20	9	6	3	39.6%	22.8%	23.8%	12.0%	12.2%	9.4%
67	371	180	180	174	152	125	89	59	141	115	93	71	46	30	78.3%	66.1%	61.2%	56.8%	51.7%	50.8%
68	485	219	196	117	95	73	50	29	102	36	24	10	4	1	52.0%	30.8%	25.3%	13.7%	8.0%	3.4%
69	838	250	235	212	185	131	81	56	180	166	128	76	47	34	76.6%	78.3%	69.2%	58.0%	58.0%	60.7%
70	256	112	104	95	88	87	71	59	85	70	60	52	34	29	81.7%	73.7%	68.2%	59.8%	47.9%	49.2%
71	711	295	250	199	169	144	108	60	188	130	95	82	50	23	75.2%	65.3%	56.2%	56.9%	46.3%	38.3%
72	832	319	315	315	298	263	221	177	269	251	230	199	167	138	85.4%	79.7%	77.2%	75.7%	75.6%	78.0%
73	274	50	50	49	44	37	29	14	25	16	14	3	5	1	50.0%	32.7%	31.8%	8.1%	17.2%	7.1%
74	2,162	305	305	280	231	185	131	89	186	167	106	81	58	34	61.0%	59.6%	45.9%	43.8%	44.3%	38.2%
75	220	115	115	115	102	88	77	67	98	81	71	58	44	36	85.2%	70.4%	69.6%	65.9%	57.1%	53.7%
76	346	51	51	34	28	10	6		32	15	10	6	3		62.7%	44.1%	35.7%	60.0%	50.0%	
77	329	147	147	147	147	135	121	95	60	47	21	8	0	0	40.8%	32.0%	14.3%	5.9%	0.0%	0.0%
78	132	77	49	31	24	24	24	24	34	8	0	3	5	3	69.4%	25.8%	0.0%	12.5%	20.8%	12.5%
79	443	280	280	280	235	190	143	114	244	227	190	150	112	85	87.1%	81.1%	80.9%	78.9%	78.3%	74.6%



**Table F-1: Study Enrollment and Program Interview Completion for Grant Communities Initially Funded in 2002–2006 as of August 2009 (continued)**

Community	Descriptive Sample <sup>a</sup>	Outcome Sample <sup>b</sup>	Eligible for Interview at Each Assessment Point <sup>c</sup>						Completed Interview at Each Assessment Point <sup>d</sup>						Interview Completion Rate at Each Assessment Pointe					
			6-Month	12-Month	18-Month	24-Month	30-Month	36-Month	6-Month	12-Month	18-Month	24-Month	30-Month	36-Month	6-Month	12-Month	18-Month	24-Month	30-Month	36-Month
80	459	168	137	119	81	63	37	18	72	49	23	21	7	2	52.6%	41.2%	28.4%	33.3%	18.9%	11.1%
81	237	142	90	44	18	5			72	28	12	4			80.0%	63.6%	66.7%	80.0%		
82	1,436	238	230	212	169	125	81	29	163	140	93	64	44	11	70.9%	66.0%	55.0%	51.2%	54.3%	37.9%
83	1513	280	256	194	156	120	77	31	220	162	117	90	56	20	85.9%	83.5%	75.0%	75.0%	72.7%	64.5%
100	158	77	53	44	30	18			27	16	15	0			50.9%	36.4%	50.0%	0.0%		
101	122	63	45	41	29	21			37	29	26	8			82.2%	70.7%	89.7%	38.1%		
102	256	61	52	39	14	3	1		35	16	3	0	0		67.3%	41.0%	21.4%	0.0%	0.0%	
103	276	189	157	121	69	13			67	44	23	2			42.7%	36.4%	33.3%	15.4%		
104	356	74	32	10					20	3					62.5%	30.0%				
105	129	93	74	65	40	14			67	55	29	11			90.5%	84.6%	72.5%	78.6%		
106	343	148	98	77	62	19			81	51	28	11			82.7%	66.2%	45.2%	57.9%		
107	76	32	24	18	13	6			18	12	5	3			75.0%	66.7%	38.5%	50.0%		
108	493	107	86	80	50	13			37	21	16	5			43.0%	26.3%	32.0%	38.5%		
109	110	73	58	31	10	1			42	23	6	1			72.4%	74.2%	60.0%	100.0%		
110	369	180	156	101	57				127	68	34				81.4%	67.3%	59.6%			
111	300	147	114	85	53	22			92	57	33	10			80.7%	67.1%	62.3%	45.5%		
112	217	171	135	105	66	31			101	65	38	13			74.8%	61.9%	57.6%	41.9%		
113	367	207	135	88	34	11			117	73	23	7			86.7%	83.0%	67.6%	63.6%		
114	58	40	30	24	19	1			24	18	16	1			80.0%	75.0%	84.2%	100.0%		
115	780	145	88	57	25				49	24	16				55.7%	42.1%	64.0%			
116	446	223	174	124	98	28			108	66	59	15			62.1%	53.2%	60.2%	53.6%		
117	75	54	51	40	22	12			41	31	17	9			80.4%	77.5%	77.3%	75.0%		
118	94	69	53	24	7				48	19	5				90.6%	79.2%	71.4%			
119	143	49	31	14	6				18	9	2				58.1%	64.3%	33.3%			

**Table F-1: Study Enrollment and Program Interview Completion for Grant Communities Initially Funded in 2002–2006 as of August 2009 (continued)**

Community	Descriptive Sample <sup>a</sup>	Outcome Sample <sup>b</sup>	Eligible for Interview at Each Assessment Point <sup>c</sup>						Completed Interview at Each Assessment Point <sup>d</sup>						Interview Completion Rate at Each Assessment Point <sup>e</sup>					
			6-Month	12-Month	18-Month	24-Month	30-Month	36-Month	6-Month	12-Month	18-Month	24-Month	30-Month	36-Month	6-Month	12-Month	18-Month	24-Month	30-Month	36-Month
120	240	112	93	61	39	18		63	40	17	8			67.7%	65.6%	43.6%	44.4%			
121	78	26	21	13				15	5					71.4%	38.5%					
122	203	135	100	69	40	17		72	42	26	14			72.0%	60.9%	65.0%	82.4%			
123	132	69	57	51	43	27		40	26	16	9			70.2%	51.0%	37.2%	33.3%			
120	240	112	93	61	39	18		63	40	17	8			67.7%	65.6%	43.6%	44.4%			
121	78	26	21	13				15	5					71.4%	38.5%					
122	203	135	100	69	40	17		72	42	26	14			72.0%	60.9%	65.0%	82.4%			
123	132	69	57	51	43	27		40	26	16	9			70.2%	51.0%	37.2%	33.3%			
124	59	39	29	21	10	1		19	12	6	1			65.5%	57.1%	60.0%	100.0%			
125	37	0																		
126	236	66	11					4						36.4%						
127	125	56	30	17				23	10					76.7%	58.8%					
128	135	79	47	23				30	18					63.8%	78.3%					
129	47	36	25	10				24	9					96.0%	90.0%					
<b>Aggregated Number<sup>f</sup></b>	<b>24,089</b>	<b>7,502</b>	<b>6,423</b>	<b>5,300</b>	<b>4,124</b>	<b>2,955</b>	<b>2,019</b>	<b>1,373</b>	<b>4,591</b>	<b>3,326</b>	<b>2,352</b>	<b>1,566</b>	<b>991</b>	<b>649</b>	<b>71.5%</b>	<b>62.8%</b>	<b>57.0%</b>	<b>53.0%</b>	<b>49.1%</b>	<b>47.3%</b>

<sup>a</sup> Descriptive Sample was based on number of cases with at least one piece of descriptive information.

<sup>b</sup> Outcome Sample was based on number of cases with at least one of the required outcome instruments at baseline.

<sup>c</sup> Eligibility for Interview at Each Assessment Point was derived based on the following criteria: (a) data indicated that the child had been enrolled in the system for 6 months or longer (for 6-month follow-up), 12 months or longer (for 12-month follow-up), 18 months or longer (for 18-month follow-up), 24 months or longer (for 24-month follow-up), 30 months or longer (for 30-month follow-up), or 36 months or longer (for 36-month follow-up); and (b) the child had at least one of the required outcome instruments administered at intake.

<sup>d</sup> Completed Interview at Each Assessment Point was derived based on the following criteria: (a) 6-month outcome sample: cases with 6-month data on at least one of the required outcome instruments; (b) 12-month outcome sample: cases with 12-month data on at least one of the required outcome instruments; (c) 18-month outcome sample: cases with 18-month data on at least one of the required outcome instruments; (d) 24-month outcome sample: cases with 24-month data on at least one of the required outcome instruments; (e) 30-month outcome sample: cases with 30-month data on at least one of the required outcome instruments; and (f) 36-month outcome sample: cases with 36-month data on at least one of the required outcome instruments.

<sup>e</sup> Interview Completion Rate at Each Assessment Point was calculated as follows: (Completed interview at each assessment point / Eligibility for interview at each assessment point) x 100%

<sup>f</sup> The baseline descriptive and outcome sample numbers reflect the enrollment and data collection efforts of all sites since the beginning of the grant program. During FY 2006 two sites were defunded. Those sites contributed about 400 children to the baseline descriptive sample and about 20 children to the baseline outcome sample. Data from the two sites are not included in the aggregated number for eligible for interview, completed interview, and interview completion rate at each assessment point.

## Demographic Characteristics, Clinical Status, and Child and Family Outcomes

Table F-2 presents detailed information on the baseline child, youth, and family demographics and enrollment information of children, youth, and families enrolled in grant communities initially funded in 2002–2006.

Baseline child and youth history and family characteristics are shown in Table F-3 for children, youth, and families enrolled in grant communities initially funded in 2002–2006.

Information on child, youth, and family clinical and functional outcome indicators at intake, 6 months, 12 months, 18 months, and 24 months are presented for children, youth, and families enrolled in grant communities initially funded in 2002–2006 in Table F-4. Information on clinical and functional outcomes at each data collection point does not represent changes over time. Rather, the information provides *descriptive* information on these outcomes at each data collection point. Some children, youth, and families may not have data collected across all data collection points.

**Table F-2: Baseline Characteristics: Child and Youth Demographic and Enrollment Information for Grant Communities Initially Funded in 2002–2006**

Grant Communities Initially Funded in 2002–2006			
	Overall Sample (n = 24,524)	Descriptive Sample (n = 16,991)	Outcome Sample (n = 7,533)
<b>Gender</b>	(n = 24,335)	(n = 16,951)	(n = 7,384)
Male	62.9%	62.0%	65.0%
Female	37.1%	38.0%	35.0%
<b>Age in Years</b>	(n = 24,209)	(n = 16,842)	(n = 7,367)
Mean (SD)	11.4 (4.5)	11.4 (4.6)	11.2 (4.3)
0–5 Years	13.4%	13.3%	13.5%
6–11 Years	30.1%	29.5%	31.6%
12–15 Years	37.6%	37.0%	39.1%
16 Years or Older	18.9%	20.2%	15.8%
<b>Race and Ethnicity</b>	(n = 23,884)	(n = 16,580)	(n = 7,304)
American Indian or Alaska Native Alone	4.4%	4.6%	4.0%
Asian Alone	1.3%	1.4%	1.0%
Black or African American Alone	24.1%	22.7%	27.1%
Native Hawaiian or Other Pacific Islander Alone	1.4%	1.1%	1.9%
White Alone	40.3%	40.5%	39.7%
Of Hispanic Origin	24.0%	25.5%	20.7%
Multiracial	0.3%	0.3%	0.2%
Other, Single Race	4.2%	3.7%	5.4%

**Table F-2: Baseline Characteristics: Child and Youth Demographic and Enrollment Information for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006			
	Overall Sample ( <i>n</i> = 24,524)	Descriptive Sample ( <i>n</i> = 16,991)	Outcome Sample ( <i>n</i> = 7,533)
<b>Participating in Service Plan Development<sup>a</sup></b>	( <i>n</i> = 15,035)	( <i>n</i> = 9,495)	( <i>n</i> = 5,540)
Caregiver	90.0%	87.3%	94.5%
Child	77.3%	79.7%	73.3%
Other Family Member	31.5%	31.5%	31.4%
Case Manager	76.3%	74.9%	78.6%
Therapist	34.6%	31.4%	40.1%
Other Mental Health Staff	17.7%	17.8%	17.6%
Education Staff	16.8%	15.3%	19.3%
Child Welfare Staff	11.9%	12.8%	10.4%
Juvenile Justice	8.7%	8.8%	8.5%
Health Staff	3.8%	4.3%	2.9%
Family Advocate	21.3%	19.3%	24.9%
Other Participant	19.1%	17.2%	22.2%
<b>Referral Sources</b>	( <i>n</i> = 24,018)	( <i>n</i> = 16,780)	( <i>n</i> = 7,238)
Corrections	0.5%	0.6%	0.4%
Juvenile Court	4.9%	4.7%	5.2%
Probation	6.1%	6.8%	4.5%
School	21.3%	20.9%	22.3%
Mental Health agency, clinic, provider	26.1%	24.6%	29.6%
Physical Health Care agency, clinic, provider	1.8%	1.9%	1.6%
Child Welfare	15.5%	17.9%	10.1%
Substance abuse agency, clinic, provider	0.6%	0.5%	0.9%
Family court	0.6%	0.7%	0.4%
Caregiver	10.8%	9.9%	12.9%
Self (youth referred himself or herself)	2.6%	3.0%	1.8%
Other	8.8%	8.5%	9.6%
Early Care: Early Head Start Program	0.0%	0.0%	0.1%
Early Care: Head Start Program	0.1%	0.0%	0.1%
Early Care: Early Intervention (Part C)	0.1%	0.0%	0.2%
Early Care: Preschool Special Education Program (Part B)	0.0%	0.0%	0.1%
Other Early Care and Education Programs/Providers	0.0%	0.0%	0.1%
Early Care: Other	0.0%	0.0%	0.1%

**Table F-2: Baseline Characteristics: Child and Youth Demographic and Enrollment Information for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006			
	Overall Sample (n = 24,524)	Descriptive Sample (n = 16,991)	Outcome Sample (n = 7,533)
<b>Agency Involvement<sup>a</sup></b>	(n = 24,360)	(n = 16,974)	(n = 7,386)
Corrections	1.9%	1.9%	1.9%
Juvenile Court	12.5%	12.0%	13.8%
Probation	11.4%	11.3%	11.5%
School	61.1%	58.9%	66.0%
Mental Health	58.0%	52.9%	69.8%
Physical Health	15.2%	13.8%	18.5%
Child Welfare	23.0%	24.7%	19.3%
Substance Abuse Clinic	3.1%	3.0%	3.4%
Family Court	6.3%	6.7%	5.3%
Other	14.9%	15.2%	14.2%
Early Care: Early Head Start Program	0.2%	0.1%	0.5%
Early Care: Head Start Program	0.5%	0.3%	1.0%
Early Intervention	0.2%	0.1%	0.5%
Preschool Special Education Program (Part B)	0.3%	0.1%	0.6%
Other Early Care and Education Programs/Providers	0.7%	0.6%	1.1%
Early Care: Other	0.4%	0.2%	0.7%
<b>DSM–IV Axis I and II Diagnosis at Intake<sup>a</sup></b>	(n = 19,677)	(n = 13,241)	(n = 6,436)
Substance Use Disorders	6.3%	6.7%	5.5%
Schizophrenia and Other Psychotic Disorders	2.2%	2.2%	2.2%
Mood Disorders	35.2%	34.5%	36.6%
Autism and Other Pervasive Developmental Disorders	3.1%	2.7%	4.0%
Anxiety Disorder	7.8%	7.5%	8.4%
Adjustment Disorders	13.9%	14.4%	12.7%
Posttraumatic Stress Disorder and Acute Stress Disorder	8.7%	8.6%	8.8%
Impulse Control Disorders	2.6%	2.4%	2.9%
Oppositional Defiant Disorder	23.3%	21.6%	26.7%
Attention-Deficit/Hyperactivity Disorder (ADHD)	31.7%	28.5%	38.3%
Personality Disorders	1.0%	1.0%	1.1%
Mental Retardation	2.3%	2.4%	2.0%
Learning, Motor Skills, and Communication Disorders	3.8%	3.7%	4.2%
Conduct Disorder	5.9%	5.9%	5.9%
Disruptive Behavior Disorder	6.9%	6.4%	8.0%
Other	10.4%	11.5%	8.3%
V Code	7.6%	7.8%	7.1%
Substance-Induced Disorders	0.3%	0.3%	0.3%

**Table F–2: Baseline Characteristics: Child and Youth Demographic and Enrollment Information for Grant Communities Initially Funded in 2002–2006 (continued)**

<b>Grant Communities Initially Funded in 2002–2006</b>			
	<b>Overall Sample (n = 24,524)</b>	<b>Descriptive Sample (n = 16,991)</b>	<b>Outcome Sample (n = 7,533)</b>
<b>DC:0–3R Axis I Diagnosis at Intake<sup>a</sup></b>	<b>(n = 377)</b>	<b>(n = 236)</b>	<b>(n = 141)</b>
Posttraumatic Stress Disorder	7.7%	8.1%	7.1%
Deprivation/Maltreatment Disorder	5.3%	4.2%	7.1%
Disorders of Affect	1.9%	2.5%	0.7%
Prolonged Bereavement/Grief Reaction	1.3%	0.8%	2.1%
Anxiety Disorders	14.9%	12.7%	18.4%
Depression	2.7%	3.0%	2.1%
Mixed Disorders of Emotional Expressiveness	4.5%	5.9%	2.1%
Adjustment Disorder	20.7%	20.3%	21.3%
Regulation Disorders of Sensory Processing	4.5%	4.7%	4.3%
Hypersensitive	11.4%	11.9%	10.6%
Hyposensitive/Underresponsive	2.4%	0.4%	5.7%
Sensory Stimulation-Seeking/Impulsive	17.0%	14.8%	20.6%
Sleep Disorders	1.9%	2.5%	0.7%
Feeding Disorders	1.1%	1.7%	0.0%
Disorders of Relating and Communicating	3.4%	3.0%	4.3%
Multi-System Developmental Disorder (MSDD)	2.1%	1.3%	3.5%
Other Disorders	11.9%	15.3%	6.4%
<b>Presenting Problems<sup>a</sup></b>	<b>(n = 23,162)</b>	<b>(n = 16,038)</b>	<b>(n = 7,124)</b>
Suicide Ideation/Self-Injury	16.5%	16.6%	16.4%
Depression	35.2%	36.6%	34.6%
Anxiety	28.3%	29.0%	28.0%
Hyperactivity/Attention	38.0%	45.4%	34.7%
Conduct/Delinquency	57.4%	63.1%	55.0%
Substance Use	11.6%	11.8%	11.5%
Adjustment	32.6%	33.8%	32.1%
Psychotic Behaviors	5.3%	6.3%	4.9%
Pervasive Development Disability	4.9%	6.4%	4.3%
Specific Development Disability	5.9%	7.5%	5.2%
Learning Disability	13.4%	15.5%	12.5%
School Performance	32.8%	39.8%	29.6%
Eating Disorder	4.0%	2.1%	4.8%
Other	13.0%	13.5%	12.8%



**Table F-2: Baseline Characteristics: Child and Youth Demographic and Enrollment Information for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006			
	Overall Sample (n = 24,524)	Descriptive Sample (n = 16,991)	Outcome Sample (n = 7,533)
<b>Presenting Problems Relevant for Early Childhood<sup>a,b</sup></b>	(n = 1,220)	(n = 583)	(n = 637)
Feeding problems in young children	5.2%	3.9%	6.4%
Disruptive behaviors in young children	62.0%	56.3%	67.2%
Persistent noncompliance	27.3%	25.0%	29.4%
Excessive crying/tantrums	29.7%	25.0%	33.9%
Separation problems	15.8%	15.4%	16.2%
Non-engagement with people	8.0%	7.7%	8.3%
Sleeping problems	15.4%	11.8%	18.7%
Excluded from preschool or childcare program	9.2%	8.2%	10.0%
At risk for or has failed family home placement	14.3%	12.7%	15.9%
Maltreatment (child abuse and neglect)	11.9%	13.9%	10.0%
Other problems that are related to child's health	3.9%	3.1%	4.7%
Maternal depression	12.0%	10.1%	13.7%
Maternal mental health (other than depression)	10.7%	9.8%	11.5%
Paternal mental health	5.4%	4.1%	6.6%
Other Caregiver mental health	1.3%	1.2%	1.4%
Maternal substance abuse/use	13.0%	14.6%	11.5%
Paternal substance abuse/use	10.2%	11.7%	8.9%
Other Caregiver substance abuse/use	1.0%	1.2%	0.8%
Family health problems	6.2%	5.5%	6.9%
Other parent/caregiver/family problems	19.0%	20.8%	17.4%
Housing Problems	10.7%	12.0%	9.4%
Early child: Other	11.9%	11.0%	12.7%
<b>Financial Resources for Services<sup>a</sup></b>	(n = 20,476)	(n = 13,763)	(n = 6,713)
Medicaid	73.4%	72.7%	74.8%
Child Health Insurance Program (CHIP)	4.2%	3.9%	4.8%
Supplemental Security Income (SSI)	7.9%	6.6%	10.7%
Temporary Assistance for Needy Families (TANF)	4.8%	4.0%	6.4%
Private Insurance	18.6%	18.8%	18.2%
Other Assistance	10.2%	9.4%	11.6%

<sup>a</sup> An individual may provide more than one response; therefore, percentages may sum to more than 100%.

<sup>b</sup> Presenting Problems of Early Childhood presents additional presenting problems that are only asked for children younger than 9.

**Table F-3: Baseline Characteristics: Child and Youth History and Family Characteristics for Grant Communities Initially Funded in 2002–2006**

Grant Communities Initially Funded in 2002–2006	
Outcome Sample ( <i>n</i> = 7,533)	
<b>Custody Status</b>	( <i>n</i> = 7,107)
Two Parents	25.7%
Biological Mother Only	49.1%
Biological Father Only	4.1%
Adoptive Parents	5.2%
Sibling(s)	0.4%
Aunt and/or Uncle	1.7%
Grandparent(s)	6.9%
Adult Friend	0.2%
Ward of the State	4.5%
Other	2.3%
<b>Living Situation<sup>a</sup></b>	( <i>n</i> = 7,194)
Biological Parent(s)	76.5%
Adoptive Family	5.2%
Relative(s)	18.9%
Non-Family or Foster Care	8.9%
Independent	1.2%
<b>Primary Caregiver Relationship to Child</b>	( <i>n</i> = 7,019)
Biological Parent	78.9%
Adoptive Parent	6.4%
Foster Parent	2.7%
Live-In Partner of Parent	0.2%
Sibling	0.4%
Aunt or Uncle	1.9%
Grandparent	7.8%
Cousin	0.3%
Other Relative	0.2%
Adult Friend	0.1%
Other	1.0%
<b>Primary Caregiver Gender</b>	( <i>n</i> = 7,125)
Male	8.2%
Female	91.8%
<b>Primary Caregiver Age in Years</b>	( <i>n</i> = 7,043)
Mean ( <i>SD</i> )	39.6 (10.3)
16–25 Years	4.5%
26–30 Years	14.0%
31–35 Years	20.9%
36–40 Years	20.2%
41–45 Years	15.7%
46–50 Years	10.5%
51 Years or older	14.3%

**Table F-3: Baseline Characteristics: Child and Youth History and Family Characteristics for Grant Communities Initially Funded in 2002–2006 (continued)**

<b>Grant Communities Initially Funded in 2002–2006</b>	
<b>Outcome Sample (n = 7,533)</b>	
<b>Primary Caregiver Race and Ethnicity</b>	(n = 7,101)
American Indian or Alaska Native Alone	3.6%
Asian Alone	0.8%
Black or African American Alone	25.5%
Native Hawaiian or Other Pacific Islander Alone	1.5%
White Alone	46.1%
Of Hispanic Origin	0.2%
Multiracial	19.5%
Other, Single Race	2.7%
<b>Whether Primary Caregiver Employed<sup>b</sup></b>	(n = 7,001)
Yes	55.5%
No	45.5%
<b>Whether Primary Caregiver Paid for Child's Services<sup>b</sup></b>	(n = 7,071)
Yes	17.9%
No	82.4%
<b>Family Income</b>	(n = 6,867)
Less Than \$5,000	14.9%
\$5,000–\$9,999	14.3%
\$10,000–\$14,000	15.4%
\$15,000–\$19,999	10.7%
\$20,000–\$24,999	10.5%
\$25,000–\$34,999	12.7%
\$35,000–\$49,999	10.4%
\$50,000–\$74,999	7.3%
\$75,000–\$99,999	2.2%
\$100,000 and Over	1.6%
<b>Family Poverty Level Status</b>	(n = 5,998)
Below Poverty	57.6%
At Poverty	16.7%
Above Poverty	25.7%

**Table F-3: Baseline Characteristics: Child and Youth History and Family Characteristics for Grant Communities Initially Funded in 2002–2006 (continued)**

<b>Grant Communities Initially Funded in 2002–2006</b>	
<b>Outcome Sample (n = 7,533)</b>	
<b>Whether Child Uses Medication</b>	(n = 7,108)
Yes	47.6%
No	52.4%
<b>Current Medications</b>	(n = 3,287)
Abilify	14.0%
Adderall	18.3%
Benzodiazepine	0.4%
Carbamazepine	0.5%
Catapres	8.2%
Celexa	3.0%
Klonopin	2.2%
Concerta	16.1%
Depakote	10.4%
Desyrel	3.1%
Dexedrine	0.8%
Effexor	1.0%
Haldol	0.4%
Lexapro	4.0%
Lamictal	3.4%
Lithium	4.3%
Neurontin	0.5%
Orap	0.1%
Paxil	1.2%
Prozac	9.2%
Risperdal	18.5%
Ritalin	7.0%
Seroquel	13.5%
Stratera	8.9%
Symbiax	0.1%
Tenex	4.4%
Trileptal	4.4%
Wellbutrin	5.2%
Xanax	0.2%
Zoloft	6.8%
Zyprexa	2.2%
Other	22.9%
<b>Child Risk Factors</b>	(n = 6,824)
None	45.1%
One or More	54.9%
Physical Abuse	22.4% (n = 6,869)
Sexual Abuse	15.8% (n = 6,719)
Running Away	28.1% (n = 7,085)
Attempted Suicide	12.2% (n = 7,051)
Substance Abuse	15.3% (n = 6,989)

**Table F-3: Baseline Characteristics: Child and Youth History and Family Characteristics for Grant Communities Initially Funded in 2002–2006 (continued)**

<b>Grant Communities Initially Funded in 2002–2006</b>	
<b>Outcome Sample (n = 7,533)</b>	
<b>Family History of Illness</b>	(n = 6,973)
Yes	85.2%
No	14.8%
Depression	69.9% (n = 6,817)
Other Mental Illness	46.4% (n = 6,775)
Alcohol or Substance Abuse	61.6% (n = 6,955)
<b>Recent Caregiver History of Illness<sup>c</sup></b>	(n = 6,892)
Yes	46.6%
No	53.4%
Depression	41.3% (n = 6,957)
Other Mental Illness	14.1% (n = 6,967)
Alcohol or Substance Abuse	7.8% (n = 7,015)
<b>Household Risk Factors</b>	
Domestic Violence	46.7% (n = 6,960)
Household Member With Criminal History	34.2% (n = 6,966)
Household Member Depression	65.8% (n = 6,870)
Household Member Mental Illness	33.7% (n = 6,863)
Household Member Substance Abuse	46.6% (n = 6,965)
<b>Child Substance Use History<sup>d</sup></b>	
<b>Number of Substances</b>	(n = 3,918)
None	40.6%
One	14.9%
Two	12.8%
Three	12.7%
Four or More	19.1%
<b>Substances Used<sup>e</sup></b>	
Alcohol	75.0% (n = 2,326)
Cigarettes	74.2% (n = 2,327)
Chewing Tobacco or Snuff	12.9% (n = 2,327)
Marijuana	64.6% (n = 2,322)
Cocaine	12.6% (n = 2,324)
Hallucinogens	9.0% (n = 2,324)
PCP	2.4% (n = 2,325)
Ketamine	0.6% (n = 2,325)
MDMA (Ecstasy)	10.0% (n = 2,321)
GHB	0.4% (n = 2,323)
Inhalants	10.3% (n = 2,325)
Heroin	2.2% (n = 2,325)
Amphetamines/Stimulants	6.3% (n = 2,320)
Painkillers	17.5% (n = 2,320)
Ritalin, Adderall, Desoxyn	10.9% (n = 2,318)
Tranquilizers	6.7% (n = 2,321)
Barbiturates/Sedatives	2.2% (n = 2,322)
Over-the-Counter/Nonprescription Drugs	10.5% (n = 2,324)
Other	4.9% (n = 2,312)

**Table F-3: Baseline Characteristics: Child and Youth History and Family Characteristics for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006	
Outcome Sample (n = 7,533)	
<b>Child Juvenile Justice Contacts<sup>d</sup></b>	
<b>Lifetime Contacts</b>	(n = 3,926)
None	43.9%
One or More	56.1%
<b>Recent Contacts<sup>b</sup></b>	
Questioned by Police	23.6% (n = 3,906)
Arrested	21.8% (n = 3,912)
Told to Appear in Court	20.6% (n = 3,899)
Convicted of a Crime	11.7% (n = 3,910)
On Probation	25.8% (n = 3,912)
Sentenced to Secure Facility	11.2% (n = 3,902)

<sup>a</sup> An individual may provide more than one response; therefore, percentages may sum to more than 100%.

<sup>b</sup> Information pertains to the 6 months prior to intake.

<sup>c</sup> Caregiver with a history of illness who provided care or supervision in the 6 months prior to intake.

<sup>d</sup> Drug use history and juvenile justice contacts obtained only for youth 11 years and older.

<sup>e</sup> Percentages for each substance are based on the number of youth who reported any substance use history. Youth may report using more than one substance; therefore, percentages may sum to more than 100%.



**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006**

Grant Communities Initially Funded in 2002–2006							
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)	36 Months Mean (SD)
<b>Child Behavior Checklist 1½–5 (CBCL 1½–5)</b>							
Emotionally Reactive	66.0 (11.1) (n = 902)	63.9 (10.9) (n = 476)	63.6 (10.7) (n = 273)	63.0 (11.1) (n = 126)	65.2 (11.6) (n = 48)	64.1 (12.8) (n = 14)	59.6 (11.1) (n = 5)
Sleep Problems	62.0 (12.1) (n = 902)	59.6 (11.0) (n = 476)	59.5 (11.4) (n = 273)	59.9 (11.3) (n = 126)	62.9 (13.1) (n = 48)	58.3 (11.0) (n = 14)	56.0 (6.7) (n = 5)
Withdrawn	64.0 (10.4) (n = 902)	62.2 (10.0) (n = 476)	62.0 (9.8) (n = 273)	61.8 (10.6) (n = 126)	60.2 (8.9) (n = 48)	62.8 (12.0) (n = 14)	60.0 (6.3) (n = 5)
Somatic Complaints	58.2 (8.5) (n = 902)	57.0 (8.0) (n = 476)	57.5 (8.7) (n = 273)	56.9 (8.6) (n = 126)	58.3 (10.3) (n = 48)	60.3 (10.4) (n = 14)	56.6 (7.8) (n = 5)
Anxious/Depressed	62.5 (10.4) (n = 902)	60.3 (9.8) (n = 476)	59.6 (8.8) (n = 273)	60.6 (9.7) (n = 126)	60.8 (9.6) (n = 48)	62.5 (9.0) (n = 14)	59.2 (9.0) (n = 5)
Attention Problems	63.6 (9.1) (n = 902)	62.1 (9.0) (n = 476)	61.1 (8.9) (n = 273)	59.5 (8.9) (n = 126)	61.0 (8.6) (n = 48)	59.1 (8.8) (n = 14)	56.6 (7.5) (n = 5)
Aggressive Problems	70.5 (13.8) (n = 902)	66.3 (12.6) (n = 476)	65.7 (13.1) (n = 273)	65.4 (12.9) (n = 126)	63.4 (12.4) (n = 48)	60.9 (13.3) (n = 14)	55.6 (7.3) (n = 5)
Internalizing Problems	64.0 (10.2) (n = 902)	61.3 (11.3) (n = 476)	61.0 (11.3) (n = 273)	60.5 (12.2) (n = 126)	61.4 (12.2) (n = 48)	62.1 (14.5) (n = 14)	59.2 (10.8) (n = 5)
Externalizing Problems	68.6 (12.8) (n = 902)	64.6 (12.6) (n = 476)	63.1 (13.5) (n = 273)	62.0 (14.0) (n = 126)	61.7 (13.4) (n = 48)	57.6 (14.8) (n = 14)	54.0 (10.1) (n = 5)
<b>Total Problems</b>	<b>67.4 (11.2)</b> <b>(n = 902)</b>	<b>63.7 (12.0)</b> <b>(n = 476)</b>	<b>63.0 (12.7)</b> <b>(n = 273)</b>	<b>62.0 (13.6)</b> <b>(n = 126)</b>	<b>63.1 (13.8)</b> <b>(n = 48)</b>	<b>61.4 (15.8)</b> <b>(n = 14)</b>	<b>57.2 (13.1)</b> <b>(n = 5)</b>
<b>At/Above Clinical Level (Total Problems)</b>	<b>56.2%</b> <b>(n = 902)</b>	<b>45.4%</b> <b>(n = 476)</b>	<b>45.4%</b> <b>(n = 273)</b>	<b>46.0%</b> <b>(n = 126)</b>	<b>47.9%</b> <b>(n = 48)</b>	<b>64.3%</b> <b>(n = 14)</b>	<b>40.0%</b> <b>(n = 5)</b>

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)	36 Months Mean (SD)
<b>Child Behavior Checklist 6–18 (CBCL 6–18)</b>							
Activities Competence	36.8 (9.4) (n = 5,924)	36.3 (9.3) (n = 3,914)	36.3 (9.2) (n = 2,894)	36.2 (9.5) (n = 2,111)	36.2 (9.2) (n = 1,402)	36.3 (9.2) (n = 912)	36.3 (9.2) (n = 608)
Social Competence	37.0 (9.1) (n = 5,776)	37.9 (9.0) (n = 3,835)	38.1 (9.0) (n = 2,833)	38.2 (9.0) (n = 2,062)	38.6 (8.7) (n = 1,363)	38.4 (8.8) (n = 899)	39.0 (9.1) (n = 593)
School Competence	36.7 (8.5) (n = 5,338)	37.7 (8.6) (n = 3,541)	38.0 (8.7) (n = 2,617)	38.1 (9.0) (n = 1,901)	38.2 (8.9) (n = 1,225)	38.2 (8.8) (n = 772)	38.1 (8.9) (n = 494)
Total Competence	31.9 (8.6) (n = 5,115)	32.4 (8.7) (n = 3,398)	32.6 (8.9) (n = 2,515)	32.6 (9.2) (n = 1,815)	33.1 (9.0) (n = 1,167)	32.9 (8.8) (n = 737)	33.5 (9.3) (n = 466)
Anxious/Depressed	65.1 (10.8) (n = 6,045)	62.7 (10.4) (n = 3,981)	61.9 (10.1) (n = 2,939)	61.4 (10.2) (n = 2,162)	61.0 (10.3) (n = 1,438)	59.9 (9.6) (n = 936)	59.8 (9.8) (n = 621)
Withdrawn	65.7 (10.1) (n = 6,045)	63.9 (9.9) (n = 3,981)	63.0 (9.6) (n = 2,939)	62.5 (9.5) (n = 2,162)	62.2 (9.4) (n = 1,438)	61.9 (9.3) (n = 936)	62.0 (9.4) (n = 621)
Somatic Complaints	61.3 (9.4) (n = 6,045)	59.9 (9.3) (n = 3,981)	59.4 (9.0) (n = 2,939)	59.2 (9.0) (n = 2,162)	58.8 (9.1) (n = 1,438)	58.1 (8.5) (n = 936)	58.4 (8.5) (n = 621)
Social Problems	66.4 (9.6) (n = 6,045)	64.8 (9.6) (n = 3,981)	64.2 (9.6) (n = 2,939)	63.8 (9.7) (n = 2,162)	63.5 (9.9) (n = 1,438)	63.0 (9.7) (n = 936)	63.0 (9.4) (n = 621)
Thought Problems	66.9 (10.0) (n = 6,045)	65.0 (10.0) (n = 3,981)	64.2 (9.9) (n = 2,939)	63.7 (10.0) (n = 2,162)	63.5 (10.1) (n = 1,438)	62.8 (9.7) (n = 936)	62.5 (9.9) (n = 621)
Attention Problems	68.2 (10.9) (n = 6,045)	66.2 (10.6) (n = 3,981)	65.2 (10.4) (n = 2,939)	64.5 (10.4) (n = 2,162)	64.0 (10.3) (n = 1,438)	63.5 (10.2) (n = 936)	63.9 (10.4) (n = 621)
Rule-Breaking Behavior	67.3 (9.0) (n = 6,045)	65.6 (9.0) (n = 3,981)	64.9 (9.0) (n = 2,939)	64.2 (9.0) (n = 2,162)	64.1 (9.2) (n = 1,438)	64.0 (9.1) (n = 936)	64.2 (9.5) (n = 621)
Aggressive Behavior	72.0 (12.4) (n = 6,045)	69.5 (12.1) (n = 3,981)	68.4 (12.2) (n = 2,939)	67.7 (12.2) (n = 2,162)	67.1 (12.0) (n = 1,438)	67.0 (12.0) (n = 936)	66.4 (12.0) (n = 621)
Internalizing	65.3 (10.0) (n = 6,045)	62.8 (10.7) (n = 3,981)	61.7 (11.0) (n = 2,939)	61.1 (11.2) (n = 2,162)	60.4 (11.7) (n = 1,438)	59.4 (11.4) (n = 936)	59.4 (11.6) (n = 621)
Externalizing	69.5 (9.8) (n = 6,045)	67.4 (10.2) (n = 3,981)	66.4 (10.5) (n = 2,939)	65.7 (10.8) (n = 2,162)	65.2 (11.1) (n = 1,438)	65.0 (11.3) (n = 936)	64.8 (11.3) (n = 621)
<b>Total Problems</b>	<b>69.4 (9.2)</b> <b>(n = 6,045)</b>	<b>67.1 (10.0)</b> <b>(n = 3,981)</b>	<b>66.0 (10.4)</b> <b>(n = 2,939)</b>	<b>65.1 (11.0)</b> <b>(n = 2,162)</b>	<b>64.5 (11.5)</b> <b>(n = 1,438)</b>	<b>63.9 (11.6)</b> <b>(n = 936)</b>	<b>63.8 (11.6)</b> <b>(n = 621)</b>
<b>At/Above Clinical Level (Total Problems)</b>	<b>77.4%</b> <b>(n = 6,045)</b>	<b>68.9%</b> <b>(n = 3,981)</b>	<b>65.6%</b> <b>(n = 2,939)</b>	<b>62.7%</b> <b>(n = 2,162)</b>	<b>61.8%</b> <b>(n = 1,438)</b>	<b>59.6%</b> <b>(n = 936)</b>	<b>59.9%</b> <b>(n = 621)</b>

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)	36 Months Mean (SD)
<b>Behavioral and Emotional Rating Scale–2, Caregiver (BERS–2C)</b>							
Intrapersonal Strengths	7.7 (3.3) (n = 6,323)	8 (3.4) (n = 4,153)	8.2 (3.3) (n = 3,052)	8.3 (3.4) (n = 2,220)	8.4 (3.4) (n = 1,474)	8.4 (3.5) (n = 956)	8.6 (3.5) (n = 639)
Interpersonal Strengths	6.6 (3.1) (n = 6,341)	7.1 (3.2) (n = 4,158)	7.3 (3.1) (n = 3,058)	7.5 (3.3) (n = 2,222)	7.6 (3.3) (n = 1,473)	7.6 (3.3) (n = 955)	7.7 (3.3) (n = 640)
School Functioning	6.4 (3.0) (n = 6,041)	7.0 (3.1) (n = 3,959)	7.2 (3.1) (n = 2,908)	7.4 (3.2) (n = 2,086)	7.3 (3.3) (n = 1,375)	7.3 (3.3) (n = 885)	7.3 (3.3) (n = 580)
Family Involvement	7.1 (2.9) (n = 6,352)	7.4 (2.9) (n = 4,158)	7.5 (2.9) (n = 3,054)	7.6 (3.0) (n = 2,221)	7.6 (3.1) (n = 1,466)	7.6 (3.2) (n = 954)	7.5 (3) (n = 637)
Affective Strengths	8.1 (3.1) (n = 6,358)	8.3 (3.1) (n = 4,164)	8.4 (3.1) (n = 3,061)	8.5 (3.0) (n = 2,223)	8.5 (3.1) (n = 1,475)	8.5 (3.2) (n = 958)	8.4 (3.1) (n = 639)
Career Strengths	8.8 (3.6) (n = 5,310)	9.0 (3.6) (n = 3,580)	9.2 (3.5) (n = 2,675)	9.3 (3.6) (n = 1,966)	9.4 (3.5) (n = 1,312)	9.4 (3.7) (n = 853)	9.3 (3.6) (n = 591)
<b>Strengths Quotient</b>	<b>80.5 (17.1)</b> <b>(n = 6,007)</b>	<b>83.2 (18.0)</b> <b>(n = 3,950)</b>	<b>83.2 (18.0)</b> <b>(n = 3,950)</b>	<b>85.2 (18.6)</b> <b>(n = 2,079)</b>	<b>85.7 (19.0)</b> <b>(n = 1,368)</b>	<b>85.4 (19.5)</b> <b>(n = 880)</b>	<b>85.2 (18.9)</b> <b>(n = 578)</b>
<b>Behavioral and Emotional Rating Scale–2, Youth (BERS–2Y)</b>							
Intrapersonal Strengths	9.3 (2.9) (n = 4,024)	9.5 (3.0) (n = 2,623)	9.5 (2.9) (n = 1,991)	9.7 (2.9) (n = 1,527)	9.7 (3.0) (n = 1,066)	9.7 (2.9) (n = 700)	9.9 (2.9) (n = 498)
Interpersonal Strengths	8.6 (3.3) (n = 4,021)	9.0 (3.4) (n = 2,619)	9.1 (3.3) (n = 1,989)	9.4 (3.4) (n = 1,526)	9.4 (3.4) (n = 1,065)	9.7 (3.4) (n = 700)	9.8 (3.4) (n = 498)
School Functioning	8.4 (3.0) (n = 3,958)	8.8 (3.1) (n = 2,555)	8.9 (3.0) (n = 1,922)	9.1 (3.1) (n = 1,451)	9.0 (3.0) (n = 988)	9.2 (3.0) (n = 646)	9.3 (3.1) (n = 450)
Family Involvement	8.8 (3.0) (n = 4,025)	9.1 (3.0) (n = 2,617)	9.2 (2.9) (n = 1,990)	9.3 (2.9) (n = 1,525)	9.3 (2.9) (n = 1,063)	9.4 (3.0) (n = 698)	9.6 (3.2) (n = 498)
Affective Strengths	9.7 (3.1) (n = 4,027)	9.9 (3.1) (n = 2,622)	10.0 (3.1) (n = 1,991)	10.2 (2.9) (n = 1,526)	10.2 (3.0) (n = 1,066)	10.4 (3.0) (n = 701)	10.5 (3.0) (n = 498)
Career Strengths	9.6 (2.9) (n = 3,824)	9.8 (2.8) (n = 2,552)	9.8 (2.8) (n = 1,937)	9.9 (2.7) (n = 1,507)	9.9 (2.8) (n = 1,060)	9.9 (2.8) (n = 688)	10.0 (2.7) (n = 495)
<b>Strengths Quotient</b>	<b>92.7 (16.7)</b> <b>(n = 3,950)</b>	<b>95.0 (17.2)</b> <b>(n = 2,547)</b>	<b>95.5 (17.2)</b> <b>(n = 1,920)</b>	<b>96.9 (17.1)</b> <b>(n = 1,451)</b>	<b>96.7 (17.3)</b> <b>(n = 985)</b>	<b>97.9 (17.3)</b> <b>(n = 644)</b>	<b>98.6 (17.6)</b> <b>(n = 450)</b>

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)	36 Months Mean (SD)
<b>Columbia Impairment Scale (CIS)</b>							
<b>Overall Level of Impairment</b>	<b>22.6 (10.6)</b> <b>(n = 6,895)</b>	<b>20.4 (10.6)</b> <b>(n = 4,416)</b>	<b>19.7 (10.6)</b> <b>(n = 3,200)</b>	<b>19.0 (10.8)</b> <b>(n = 2,285)</b>	<b>18.7 (10.8)</b> <b>(n = 1,494)</b>	<b>18.7 (10.9)</b> <b>(n = 958)</b>	<b>18.4 (10.9)</b> <b>(n = 640)</b>
<b>At/Above Clinical Level</b>	<b>75.7%</b>	<b>68.7%</b>	<b>67.0%</b>	<b>63.9%</b>	<b>63.0%</b>	<b>62.7%</b>	<b>61.4%</b>
<b>Revised Children's Manifest Anxiety Scale (RCMAS)</b>							
Worry/Oversensitivity	10.3 (3.5) (n = 4,000)	9.9 (3.5) (n = 2,616)	9.7 (3.5) (n = 1,975)	9.6 (3.5) (n = 1,515)	9.4 (3.4) (n = 1,072)	9.4 (3.6) (n = 703)	9.3 (3.5) (n = 497)
Social Concerns/Concentration	11.0 (3.1) (n = 3,839)	10.5 (3.3) (n = 2,497)	10.3 (3.3) (n = 1,871)	10.1 (3.3) (n = 1,440)	10.0 (3.3) (n = 1,004)	9.8 (3.4) (n = 657)	9.6 (3.3) (n = 455)
Physiological Anxiety	11.2 (3.3) (n = 4,004)	10.8 (3.4) (n = 2,622)	10.7 (3.5) (n = 1,975)	10.5 (3.6) (n = 1,518)	10.4 (3.4) (n = 1,074)	10.2 (3.5) (n = 704)	10.1 (3.5) (n = 498)
<b>Total Anxiety</b>	<b>54.6 (11.8)</b> <b>(n = 3,990)</b>	<b>52.9 (12.3)</b> <b>(n = 2,606)</b>	<b>52.2 (12.9)</b> <b>(n = 1,966)</b>	<b>51.4 (12.7)</b> <b>(n = 1,513)</b>	<b>50.8 (12.3)</b> <b>(n = 1,070)</b>	<b>50.6 (13.0)</b> <b>(n = 702)</b>	<b>49.9 (12.9)</b> <b>(n = 496)</b>
<b>At/Above Clinical Level (Total Anxiety)</b>	<b>31.3%</b> <b>(n = 3,990)</b>	<b>26.2%</b> <b>(n = 2,606)</b>	<b>25.6%</b> <b>(n = 1,966)</b>	<b>24.5%</b> <b>(n = 1,513)</b>	<b>22.1%</b> <b>(n = 1,070)</b>	<b>22.8%</b> <b>(n = 702)</b>	<b>21.8%</b> <b>(n = 496)</b>
<b>Reynolds Adolescent Depression Scale–2 (RADS–2)</b>							
Dysphoric Mood	50.6 (11) (n = 4,059)	49.2 (10.9) (n = 2,630)	48.6 (10.7) (n = 1,985)	48.5 (10.8) (n = 1,528)	48.0 (10.8) (n = 1,074)	48 (11) (n = 698)	46.8 (10.5) (n = 498)
Anhedonia/Negative Affect	51.0 (7.8) (n = 4,050)	50.5 (7.7) (n = 2,626)	50.5 (7.9) (n = 1,974)	50.3 (7.7) (n = 1,517)	50.0 (7.4) (n = 1,060)	50.1 (7.8) (n = 689)	49.8 (7.5) (n = 489)
Negative Self-Evaluation	53.5 (10.7) (n = 4,051)	51.6 (10.4) (n = 2,627)	51.1 (10.1) (n = 1,980)	50.7 (10.4) (n = 1,529)	50.5 (10.1) (n = 1,072)	50.1 (10.2) (n = 698)	49.5 (9.8) (n = 498)
Somatic Complaints	51.7 (10.7) (n = 4,061)	50.1 (10.8) (n = 2,633)	49.4 (10.9) (n = 1,985)	49.3 (11.0) (n = 1,528)	48.8 (10.5) (n = 1,074)	48.4 (10.8) (n = 698)	47.1 (10.9) (n = 498)
<b>Total Depression</b>	<b>52.3 (10.4)</b> <b>(n = 4,060)</b>	<b>50.5 (10.3)</b> <b>(n = 2,633)</b>	<b>50.0 (10.2)</b> <b>(n = 1,985)</b>	<b>49.6 (10.2)</b> <b>(n = 1,529)</b>	<b>49.2 (10.0)</b> <b>(n = 1,074)</b>	<b>48.9 (10.4)</b> <b>(n = 698)</b>	<b>47.8 (10.1)</b> <b>(n = 498)</b>
<b>At/Above Clinical Level (Total Depression)</b>	<b>22.1%</b> <b>(n = 4,060)</b>	<b>17.2%</b> <b>(n = 2,633)</b>	<b>16.5%</b> <b>(n = 1,985)</b>	<b>16.2%</b> <b>(n = 1,529)</b>	<b>13.7%</b> <b>(n = 1,074)</b>	<b>14.3%</b> <b>(n = 698)</b>	<b>11.4%</b> <b>(n = 498)</b>

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)	36 Months Mean (SD)
<b>Vineland Screener (VS)</b>							
Communication	93.2 (20.8) (n = 484)	94.6 (20.7) (n = 309)	93.9 (20.2) (n = 189)	94.7 (22.2) (n = 103)	99.3 (22.2) (n = 32)	89 (18.4) (n = 2)	—
Daily Living Skills	89.4 (22.6) (n = 487)	92.7 (22.6) (n = 317)	93.6 (24.1) (n = 194)	94.4 (24.8) (n = 105)	102.5 (31.6) (n = 33)	107.5 (33.2) (n = 2)	—
Socialization	100.8 (23.4) (n = 483)	103.7 (24.7) (n = 317)	103.2 (24.2) (n = 196)	99.5 (23.0) (n = 103)	99.9 (21.4) (n = 33)	95.5 (30.4) (n = 2)	—
Motor Skills	98.6 (21.2) (n = 486)	98.9 (23.5) (n = 253)	98.3 (22.3) (n = 132)	93.7 (22.6) (n = 56)	96.2 (25.7) (n = 12)	—	—
<b>Caregiver Strain Questionnaire (CGSQ)</b>							
Subjective Externalizing Strain	2.4 (1.0) (n = 7,052)	2.2 (0.9) (n = 4,438)	2.2 (0.9) (n = 3,186)	2.1 (0.9) (n = 2,273)	2.1 (0.9) (n = 1,483)	2.1 (1.0) (n = 943)	2.1 (0.9) (n = 632)
Subjective Internalizing Strain	3.5 (1.0) (n = 7,046)	3.2 (1.1) (n = 4,438)	3.1 (1.1) (n = 3,185)	3.0 (1.1) (n = 2,273)	2.9 (1.1) (n = 1,482)	2.9 (1.2) (n = 943)	2.8 (1.1) (n = 632)
Objective Strain	2.6 (1.1) (n = 7,053)	2.4 (1.0) (n = 4,444)	2.2 (1.0) (n = 3,186)	2.2 (1.0) (n = 2,271)	2.1 (1.0) (n = 1,481)	2.1 (1.0) (n = 942)	2.1 (1.0) (n = 636)
<b>Global Strain</b>	<b>8.5 (2.6)</b> (n = 7,034)	<b>7.8 (2.7)</b> (n = 4,433)	<b>7.5 (2.6)</b> (n = 3,183)	<b>7.3 (2.7)</b> (n = 2,271)	<b>7.1 (2.7)</b> (n = 1,480)	<b>7.2 (2.8)</b> (n = 941)	<b>7.0 (2.7)</b> (n = 632)
<b>Family Life Questionnaire (FLQ)</b>							
<b>Family Functioning Scale</b>	3.4 (0.7) (n = 7,144)	3.4 (0.7) (n = 4,531)	3.4 (0.7) (n = 3,270)	3.4 (0.8) (n = 2,354)	3.4 (0.8) (n = 1,553)	3.4 (0.8) (n = 995)	3.4 (0.8) (n = 679)

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %	36 Months %
<b>Living Situations Questionnaire (LSQ)</b>							
<b>Type of Living Arrangements<sup>a</sup></b>	(n = 7,107)	(n = 4,515)	(n = 3,254)	(n = 2,360)	(n = 1,558)	(n = 1,003)	(n = 679)
Homeless	1.3%	0.8%	0.8%	0.7%	0.8%	0.6%	0.7%
Home	95.4%	95.3%	95.7%	95.5%	95.1%	94.2%	94.0%
School Dormitory	0.2%	0.2%	0.2%	0.6%	0.4%	0.2%	0.4%
Recreational Camp	0.2%	0.2%	0.2%	0.2%	0.3%	0.4%	0.1%
Emergency Shelter	1.2%	1.1%	0.5%	0.5%	0.1%	0.5%	0.3%
Foster Home	3.4%	2.2%	1.8%	1.5%	1.6%	1.9%	1.8%
Therapeutic/Specialized Foster Home	0.9%	0.8%	0.7%	0.5%	0.7%	0.4%	0.6%
Group Home	2.4%	2.2%	1.7%	1.6%	2.0%	1.4%	1.0%
Medical Hospital	1.0%	0.7%	0.3%	0.5%	0.3%	0.4%	0.1%
Residential Treatment Center	5.2%	5.3%	5.2%	4.4%	3.8%	4.9%	5.2%
Psychiatric Hospital	6.2%	4.0%	3.3%	2.7%	2.4%	2.5%	2.2%
Youth Justice Related	4.6%	4.2%	3.0%	3.3%	2.9%	3.8%	2.9%
Adult Justice Related	0.2%	0.3%	0.4%	0.4%	0.9%	0.9%	1.3%
Other	1.7%	1.0%	1.4%	0.9%	1.1%	1.7%	2.4%
<b>Caregiver Strain Questionnaire (CGSQ)</b>							
<b>Stability in Living Arrangements</b>	(n = 7,107)	(n = 4,515)	(n = 3,254)	(n = 2,360)	(n = 1,558)	(n = 1,003)	(n = 679)
One Living Arrangement	69.8%	77.6%	79.2%	81.4%	82.1%	80.2%	81.9%
Multiple Living Arrangements	30.2%	22.4%	20.8%	18.6%	17.9%	19.8%	18.1%



**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %	36 Months %
<b>Education Questionnaire–Revised (EQ-R)</b>							
<b>Attending School</b>	(n = 7,234) 93.3%	(n = 4,607) 93.7%	(n = 3,323) 93.3%	(n = 2,390) 92.4%	(n = 1,573) 89.4.4%	(n = 1,017) 86.7%	(n = 687) 83.0%
<b>Excused and Unexcused Absences</b>	(n = 6,065)	(n = 3,968)	(n = 2,850)	(n = 2,032)	(n = 1,294)	(n = 812)	(n = 517)
No Absences	16.2%	20.4%	22.7%	24.9%	26.0%	30.4%	29.2%
Less Than 1 Day Per Month	24.2%	26.4%	28.0%	28.2%	27.7%	26.5%	28.8%
About 1 Day a Month	19.5%	20.0%	19.6%	17.7%	15.9%	17.0%	12.0%
About 1 Day Every 2 Weeks	13.9%	12.6%	10.8%	11.7%	12.1%	7.9%	10.8%
About 1 Day a Week	8.1%	7.7%	6.9%	6.1%	7.4%	5.5%	6.4%
2 Days Per Week	7.3%	5.5%	5.7%	4.9%	4.4%	4.2%	5.6%
3 or More Days Per Week	10.7%	7.4%	6.2%	6.4%	6.5%	8.5%	7.2%
<b>Educational Placement</b>	(n = 6,112)	(n = 3,992)	(n = 2,871)	(n = 2,045)	(n = 1,297)	(n = 814)	(n = 517)
Public Day School	84.3%	80.3%	78.9%	78.2%	75.8%	73.5%	72.3%
Private Day/Boarding School	3.0%	3.0%	3.2%	3.1%	3.6%	3.2%	2.7%
Home School	2.2%	2.1%	2.8%	2.2%	2.5%	2.8%	2.5%
Alternative/Special Day School	16.6%	18.1%	17.5%	17.5%	19.1%	18.7%	19.1%
School in 24-Hour Restrictive Setting <sup>c</sup>	6.8%	5.2%	5.8%	5.0%	5.1%	6.6%	5.2%
Postsecondary School	0.1%	0.3%	0.7%	1.4%	1.8%	2.6%	2.7%
Other	3.7%	3.6%	3.0%	2.2%	2.3%	2.6%	4.3%
<b>School Performance</b>	(n = 5,921)	(n = 3,890)	(n = 2,802)	(n = 2,003)	(n = 1,276)	(n = 798)	(n = 516)
Grade Average A	20.5%	14.3%	13.7%	12.7%	11.8%	11.2%	9.7%
Grade Average B	9.3%	9.1%	8.2%	8.0%	8.1%	7.3%	9.3%
Grade Average C	23.3%	25.7%	26.1%	24.1%	26.3%	26.6%	29.8%
Grade Average D	20.7%	23.8%	25.1%	28.3%	29.9%	31.7%	31.2%
Failing All or Most Classes	7.3%	7.7%	9.4%	10.8%	11.1%	10.8%	11.2%
School Does Not Grade	16.3%	17.7%	15.3%	14.1%	11.6%	11.3%	7.8%
Other	2.6%	1.7%	2.2%	2.0%	1.3%	1.3%	1.0%

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %	36 Months %
<b>Education Questionnaire–Revised (EQ–R)</b>							
<b>With an Individualized Education Plan (IEP)</b>	(n = 6,060) 50.7%	(n = 3,951) 55.1%	(n = 2,833) 57.5%	(n = 2,009) 56.5%	(n = 1,272) 57.9%	(n = 794) 57.8%	(n = 504) 57.9%
<b>Reasons for IEP<sup>a</sup></b>	(n = 3,055)	(n = 2,160)	(n = 1,616)	(n = 1,132)	(n = 726)	(n = 454)	(n = 285)
Behavior/Emotional Problems	74.4%	77.7%	75.7%	77.0%	78.2%	80.6%	83.5%
Learning Disability	53.1%	51.3%	54.5%	52.8%	56.1%	60.4%	55.4%
Physical Disability	3.2%	3.3%	3.4%	3.1%	3.7%	4.0%	2.5%
Developmental Disability or Mental Retardation	15.5%	14.3%	14.2%	14.5%	—	—	—
Vision Impairment	3.5%	3.0%	2.2%	3.3%	3.2%	1.5%	1.4%
Speech Impairment	17.8%	15.5%	14.0%	14.3%	12.5%	11.0%	11.9%
Other	6.0%	5.5%	5.4%	4.8%	5.2%	2.9%	4.2%
<b>Type of Special Education Placement<sup>a</sup></b>	(n = 2,610)	(n = 1,842)	(n = 1,420)	(n = 992)	(n = 655)	(n = 413)	(n = 264)
Special Class All or Most of the Day	49.8%	53.0%	53.8%	54.1%	59.5%	58.8%	65.5%
Special Class for a Portion of the Day	30.1%	28.3%	24.6%	23.5%	22.0%	18.6%	20.1%
Special Instruction As Part of a General Education Class	24.9%	23.6%	26.3%	27.6%	24.0%	27.6%	22.7%
<b>Disciplinary Actions</b>	(n = 5,929)	(n = 3,896)	(n = 2,802)	(n = 1,987)	(n = 1,261)	(n = 781)	(n = 505)
None	37.3%	30.4%	28.9%	27.7%	27.0%	24.7%	24.8%
Suspended	1.2%	0.7%	0.4%	0.4%	0.6%	0.9%	0.6%
Expelled	3.4%	2.5%	1.9%	1.7%	1.4%	2.2%	2.4%
Suspended and Expelled	58.1%	66.4%	68.9%	70.3%	71.0%	72.2%	72.3%

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %	36 Months %
<b>Delinquency Survey–Revised (DS–R)</b>							
<b>Juvenile Justice Contacts</b>							
Questioned by Police	23.6% (n = 3,906)	17.6% (n = 2,438)	16.7% (n = 1,772)	16.9% (n = 1,311)	15.4% (n = 883)	16.5% (n = 557)	14.8% (n = 385)
Arrested	21.8% (n = 3,912)	15.3% (n = 2,445)	13.4% (n = 1,771)	11.2% (n = 1,312)	11.8% (n = 885)	11.0% (n = 557)	9.1% (n = 386)
Told to Appear in Court	20.6% (n = 3,899)	15.6% (n = 2,445)	13.8% (n = 1,769)	13.4% (n = 1,307)	11.5% (n = 885)	11.7% (n = 556)	11.2% (n = 385)
Convicted of a Crime	11.7% (n = 3,910)	7.7% (n = 2,448)	6.7% (n = 1,771)	6.1% (n = 1,309)	5.9% (n = 885)	4.7% (n = 556)	4.7% (n = 385)
On Probation	25.8% (n = 3,912)	22.5% (n = 2,447)	19.7% (n = 1,773)	17.2% (n = 1,306)	15.5% (n = 884)	12.6% (n = 557)	11.2% (n = 385)
Sentenced to Secure Facility	11.2% (n = 3,902)	7.7% (n = 2,446)	19.7% (n = 1,773)	7.0% (n = 1,309)	6.1% (n = 885)	6.8% (n = 557)	4.9% (n = 385)
<b>Substance Problem Urgency (GAIN)</b>							
<b>Substance Use and Abuse Scale (SUS–9)</b>	(n = 1,227)	(n = 661)	(n = 503)	(n = 341)	(n = 252)	(n = 162)	(n = 109)
Mean (SD)	3.2 (2.5)	2.9 (2.4)	2.6 (2.4)	2.6 (2.2)	2.2 (2.1)	1.9 (2.1)	2.0 (2.2)
Minimal/No Urgency	45.4%	52.2%	56.3%	56.6%	64.3%	66.0%	67.0%
Moderate Urgency	43.1%	39.0%	35.8%	35.8%	31.0%	29.0%	27.5%
High Urgency	11.5%	8.8%	8.0%	7.6%	4.8%	4.9%	5.5%

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %	36 Months %
<b>Substance Problem Urgency (GAIN)</b>							
<b>Substance Dependence Scale (SUS–7)</b>	( <i>n</i> = 1,219)	( <i>n</i> = 661)	( <i>n</i> = 503)	( <i>n</i> = 341)	( <i>n</i> = 251)	( <i>n</i> = 162)	( <i>n</i> = 110)
Mean ( <i>SD</i> )	1.8 (2.5)	1.6 (1.9)	1.4 (1.8)	1.4 (1.8)	1.1 (1.5)	1.0 (1.5)	1.1 (1.7)
Minimal/No Urgency	57.3%	61.3%	65.6%	64.8%	70.5%	74.7%	76.4%
Moderate Urgency	33.7%	32.8%	28.2%	29.6%	27.1%	23.5%	19.1%
High Urgency	8.9%	5.9%	6.2%	5.6%	2.4%	1.9%	4.5%
<b>Substance Problem Scale (SPS)</b>	( <i>n</i> = 1,220)	( <i>n</i> = 661)	( <i>n</i> = 503)	( <i>n</i> = 341)	( <i>n</i> = 251)	( <i>n</i> = 162)	( <i>n</i> = 110)
Mean ( <i>SD</i> )	5.0 (4.3)	4.5 (4.0)	4.0 (3.9)	4.0 (3.7)	3.3 (3.3)	2.9 (3.3)	3.1 (3.6)
Minimal/No Urgency	46.5%	50.1%	56.5%	58.1%	61.9%	66.7%	67.3%
Moderate Urgency	43.4%	42.4%	36.9%	36.4%	34.5%	30.9%	28.2%
High Urgency	10.2%	7.6%	6.5%	5.6%	3.6%	2.5%	4.5%
<b>Multi-Sector Service Contacts–Revised (MSSC–R)</b>							
<b>Number of Different Services Utilized</b>	n/a	( <i>n</i> = 3,837)	( <i>n</i> = 2,142)	( <i>n</i> = 1,313)	( <i>n</i> = 775)	( <i>n</i> = 418)	( <i>n</i> = 234)
Mean ( <i>SD</i> )		5.3 (2.9)	4.9 (2.9)	4.8 (3.0)	4.5 (2.8)	4.2 (2.8)	4.4 (2.8)
1–3		29.6%	34.1%	36.5%	41.4%	46.9%	42.3%
4–6		39.7%	37.8%	36.6%	37.8%	32.8%	36.3%
7–9		22.1%	18.8%	19.0%	13.0%	13.4%	14.1%
10 or more		8.6%	7.6%	6.6%	5.9%	5.5%	5.1%

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %	36 Months %
<b>Multi-Sector Service Contacts–Revised (MSSC–R)</b>							
<b>Type of Services Utilized</b>							
<b>Traditional</b>							
Individual Therapy	n/a	69.4% (n = 3,821)	66.1% (n = 2,134)	63.8% (n = 1,308)	65.7% (n = 770)	63.8% (n = 417)	68.7% (n = 233)
Case Management	n/a	68.6% (n = 3,813)	63.3% (n = 2,128)	62.1% (n = 1,303)	54.6% (n = 767)	49.5% (n = 414)	48.1% (n = 233)
Assessment or Evaluation	n/a	58.2% (n = 3,779)	46.8% (n = 2,117)	42.9% (n = 1,297)	42.4% (n = 766)	37.9% (n = 412)	45.5% (n = 231)
Medication Treatment/Monitoring	n/a	43.6% (n = 3,808)	46.3% (n = 2,132)	47.7% (n = 1,305)	52.0% (n = 769)	57.3% (n = 415)	50.9% (n = 234)
Family Therapy	n/a	32.3% (n = 3,812)	29.0% (n = 2,131)	28.6% (n = 1,303)	23.8% (n = 768)	22.4% (n = 416)	23.2% (n = 233)
Group Therapy	n/a	22.5% (n = 3,807)	21.6% (n = 2,130)	22.8% (n = 1,301)	18.1% (n = 763)	18.9% (n = 413)	18.8% (n = 234)
Crisis Stabilization	n/a	14.2% (n = 3,806)	10.2% (n = 2,131)	8.9% (n = 1,303)	8.9% (n = 766)	8.5% (n = 414)	6.8% (n = 234)

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %	36 Months %
<b>Multi-Sector Service Contacts–Revised (MSSC–R)</b>							
<b>Type of Services Utilized (continued)</b>							
<b>Innovative</b>							
Recreational Activities	n/a	28.4% (n = 3,813)	25.6% (n = 2,131)	26.2% (n = 1,304)	24.7% (n = 764)	19.8% (n = 415)	19.7% (n = 234)
Family Support	n/a	29.6% (n = 3,810)	25.3% (n = 2,123)	23.5% (n = 1,304)	17.1% (n = 764)	18.6% (n = 414)	14.1% (n = 234)
Transportation	n/a	23.5% (n = 3,819)	21.5% (n = 2,133)	21.4% (n = 1,304)	19.0% (n = 767)	18.8% (n = 415)	19.7% (n = 234)
Flexible Funds	n/a	21.7% (n = 3,809)	20.2% (n = 2,121)	17.6% (n = 1,304)	12.0% (n = 766)	9.7% (n = 413)	8.5% (n = 234)
Behavioral/Therapeutic Aide	n/a	14.1% (n = 3,808)	10.6% (n = 2,128)	9.7% (n = 1,306)	10.6% (n = 766)	7.3% (n = 413)	10.8% (n = 232)
Family Preservation	n/a	10.0% (n = 3,787)	8.5% (n = 2,122)	8.9% (n = 1,303)	8.7% (n = 766)	6.3% (n = 415)	4.7% (n = 233)
Respite	n/a	10.2% (n = 3,810)	11.9% (n = 2,131)	12.1% (n = 1,303)	11.3% (n = 767)	8.2% (n = 415)	7.7% (n = 234)
Transition	n/a	2.8% (n = 3,801)	2.5% (n = 2,120)	2.9% (n = 1,298)	3.9% (n = 766)	2.4% (n = 412)	2.2% (n = 231)
Independent Living	n/a	2.2% (n = 3,792)	1.9% (n = 2,122)	1.7% (n = 1,302)	3.1% (n = 765)	4.3% (n = 414)	3.4% (n = 233)
Afterschool Programs	n/a	15.3% (n = 3,809)	14.6% (n = 2,134)	13.9% (n = 1,305)	12.9% (n = 766)	11.4% (n = 412)	15.4% (n = 234)

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %	36 Months %
Multi-Sector Service Contacts–Revised (MSSC–R)							
<b>Type of Services Utilized (continued)</b>							
<b>Restrictive</b>							
Day Treatment	n/a	5.7% (n = 3,810)	6.6% (n = 2,130)	6.3% (n = 1,307)	6.9% (n = 768)	7.7% (n = 415)	8.1% (n = 234)
Inpatient Hospitalization	n/a	8.4% (n = 3,816)	6.5% (n = 2,136)	7.2% (n = 1,307)	6.5% (n = 765)	5.3% (n = 415)	6.8% (n = 234)
Residential Treatment Center	n/a	6.4% (n = 3,815)	6.2% (n = 2,131)	6.7% (n = 1,303)	5.5% (n = 766)	8.4% (n = 415)	9.0% (n = 234)
Therapeutic Group Home	n/a	2.1% (n = 3,814)	1.8% (n = 2,131)	1.2% (n = 1,303)	1.7% (n = 766)	2.4% (n = 415)	1.7% (n = 234)
Therapeutic Foster Care	n/a	1.7% (n = 3,813)	1.7% (n = 2,132)	1.7% (n = 1,301)	1.8% (n = 763)	1.0% (n = 415)	2.1% (n = 234)
Residential Camp	n/a	2.5% (n = 3,814)	1.8% (n = 2,133)	1.5% (n = 1,307)	1.7% (n = 766)	1.7% (n = 415)	1.7% (n = 234)



**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)	36 Months Mean (SD)
<b>Youth Services Survey for Families (YSS-F)</b>							
Caregiver Perception of Services	n/a	4.0 (0.7) (n = 3,578)	4.1 (0.7) (n = 2,021)	4.0 (0.7) (n = 1,244)	4.0 (0.7) (n = 722)	4.0 (0.8) (n = 381)	4.0 (0.7) (n = 222)
Access to Services	n/a	4.3 (0.8) (n = 3,575)	4.3 (0.8) (n = 2,020)	4.2 (0.8) (n = 1,244)	4.2 (0.9) (n = 723)	4.1 (0.9) (n = 381)	4.2 (0.9) (n = 222)
Participation in Treatment	n/a	4.2 (0.7) (n = 3,578)	4.2 (0.7) (n = 2,020)	4.2 (0.8) (n = 1,243)	4.2 (0.8) (n = 722)	4.1 (0.8) (n = 381)	4.2 (0.8) (n = 221)
Cultural Sensitivity	n/a	4.5 (0.6) (n = 3,495)	4.5 (0.6) (n = 1,989)	4.4 (0.7) (n = 1,228)	4.4 (0.7) (n = 710)	4.4 (0.7) (n = 368)	4.5 (0.6) (n = 219)
Satisfaction With Services	n/a	4.0 (0.9) (n = 3,578)	4.1 (0.9) (n = 2,023)	4.1 (0.9) (n = 1,246)	4.0 (0.9) (n = 722)	4.0 (1.0) (n = 381)	4.1 (0.8) (n = 222)
Outcomes	n/a	3.5 (0.9) (n = 3,566)	3.6 (0.9) (n = 2,019)	3.6 (0.9) (n = 1,242)	3.6 (0.9) (n = 724)	3.6 (1.0) (n = 381)	3.6 (1.0) (n = 222)
<b>Youth Services Survey (YSS)</b>							
Outcomes	n/a	3.9 (0.8) (n = 1,958)	3.9 (0.7) (n = 1,199)	3.9 (0.8) (n = 807)	3.9 (0.7) (n = 487)	3.9 (0.8) (n = 246)	4.1 (0.7) (n = 154)
Youth Perception of Services	n/a	3.9 (0.7) (n = 1,959)	4.0 (0.6) (n = 1,198)	4.0 (0.7) (n = 807)	4.0 (0.6) (n = 487)	4 (0.7) (n = 246)	4.1 (0.7) (n = 154)
Access to Services	n/a	4.0 (0.9) (n = 1,947)	4.0 (0.8) (n = 1,193)	4.0 (0.9) (n = 804)	4.0 (0.9) (n = 485)	3.9 (1.0) (n = 245)	4.0 (0.9) (n = 154)
Participation in Treatment	n/a	3.7 (0.9) (n = 1,958)	3.7 (0.9) (n = 1,198)	3.8 (0.9) (n = 809)	3.8 (0.9) (n = 486)	3.9 (0.8) (n = 246)	3.8 (0.9) (n = 154)
Cultural Sensitivity	n/a	4.3 (0.7) (n = 1,927)	4.3 (0.6) (n = 1,186)	4.3 (0.7) (n = 803)	4.3 (0.7) (n = 484)	4.3 (0.7) (n = 245)	4.4 (0.7) (n = 153)
Satisfaction With Services	n/a	3.9 (0.8) (n = 1,959)	4.0 (0.8) (n = 1,199)	4.0 (0.8) (n = 808)	4.0 (0.8) (n = 487)	4.0 (0.8) (n = 246)	4.1 (0.8) (n = 154)
Outcomes	n/a	3.9 (0.8) (n = 1,958)	3.9 (0.7) (n = 1,199)	3.9 (0.8) (n = 807)	3.9 (0.7) (n = 487)	3.9 (0.8) (n = 246)	4.1 (0.7) (n = 154)

**Table F-4: Child, Youth, and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, and 24 Months for Grant Communities Initially Funded in 2002–2006 (continued)**

Grant Communities Initially Funded in 2002–2006							
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)	36 Months Mean (SD)
<b>Cultural Competence and Service Provision (CCSP)</b>							
Importance of Provider's Understanding of Family's Culture	n/a	2.7 (1.2) (n = 3,704)	2.8 (1.2) (n = 2,439)	2.7 (1.1) (n = 1,768)	2.7 (1.2) (n = 1213)	2.6 (1.1) (n = 800)	2.6 (1.2) (n = 556)
Frequency of Provider's Culturally Competent Practices	n/a	4.6 (0.6) (n = 3,306)	4.6 (0.6) (n = 1,888)	4.6 (0.6) (n = 1,151)	4.6 (0.6) (n = 687)	4.6 (0.6) (n = 368)	4.6 (0.6) (n = 211)
<b>Overall</b>	n/a	4.2 (0.5) (n = 3,425)	4.2 (0.5) (n = 1,937)	4.2 (0.5) (n = 1,178)	4.2 (0.5) (n = 700)	4.2 (0.6) (n = 376)	4.2 (0.5) (n = 217)

<sup>a</sup> An individual may provide more than one response; therefore, percentages may sum to more than 100%.

<sup>b</sup> Information reported for the Vineland Screener for the Communication Domain, the Daily Living Skills Domain and the Socialization Domain combine information from the VS1 (0 to under 3), the VS2 (3 to 5) and the VS3 (6 to 12). Information reported for the Vineland Screener for the Motor Skills Subscale combine information from the VS1 (0 to 3) and the VS2 (3 to 5). The VS3 does not contain questions assessing motor skills.

<sup>c</sup> Includes school in 24-hour hospital setting, 24-hour juvenile justice facility, and 24-hour residential treatment setting.

## Appendix G

### Data Analysis Techniques Used in This Report

#### General Linear Model Repeated Measures Analysis of Variance

The General Linear Model (GLM) Repeated Measures procedure is a type of Analysis of Variance (ANOVA) when the same measurement is made several times on each subject or case. Between-subjects factors can be used to test differences in changes over time by the factors. GLM methods are used with continuous data. Using this GLM procedure, null hypotheses about the effects of both the between-subjects factors and the within-subjects factors can be tested. Interactions between factors as well as the effects of individual factors can also be investigated. In addition, the effects of constant covariates and covariate interactions with the between-subjects factors can be included. For example, a GLM Repeated Measures can be conducted to examine whether changes in the CBCL scores from intake to 6 months to 12 months are significant. Furthermore, one can include an individual-level characteristic like referral source or history of a particular risk factor as a between-subjects factor to analyze the effect of this factor on changes over time.

#### Generalized Estimating Equations (GEE)

The Generalized Estimating Equations (GEE) technique is a method of parameter estimation for correlated data. GEE methods are used with categorical data. When data are collected on the same units across successive points in time, these repeated observations are correlated over time. If this correlation is not taken into account, the standard errors of the parameter estimates will not be valid and hypothesis testing results will be non-replicable. Liang and Zeger (1986) proposed the GEE approach, which is an extension of generalized linear models (GLM), to estimate the population averaged estimates of categorical variables while accounting for the dependency between the repeated measurements. Specifically, the dependency or correlation between repeated measures is taken into account by robust estimation of the variances of the regression coefficients. In fact, the GEE approach treats the time dependency as a nuisance parameter, and a “working correlation” matrix for the vector of repeated observations from each subject is specified to account for the dependency among the repeated observations. The “working correlation” is assumed to be the same for all subjects, reflecting average dependence among the repeated observations over subjects. Several “working correlation” structures can be specified, including independent, exchangeable, autoregressive, and unstructured.

#### Zero-Inflated Poisson

Zero-inflated Poisson (ZIP) models are used to analyze count data where a large number of outcomes have a value of zero. The zero produced by the data generating process is assumed to be qualitatively different from the positive values. ZIP models allow for “excess zeros” under the assumption that the population is characterized by two regimens, one where members always have zero counts, and one where members have zero or positive counts. The likelihood of being in either regimen is estimated using a binary probability specification, while the counts in the second regimen are estimated using a Poisson specification (Greene, 1997; Mullahey, 1986).



**PEP12-CMHI2009**