

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



## Evaluation Findings: Annual Report to Congress 2004



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Substance Abuse and Mental Health Services Administration  
Center for Mental Health Services  
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THE COMPREHENSIVE COMMUNITY MENTAL  
HEALTH SERVICES FOR CHILDREN AND  
THEIR FAMILIES PROGRAM

EVALUATION FINDINGS



Annual Report to Congress  
2004

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

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## DATA HIGHLIGHTS

The 2004 Annual Report to Congress describes the characteristics, service use, and outcomes of children and families served in systems of care. The system of care approach provides a theoretical underpinning for the program and calls for a comprehensive spectrum of mental health services and other support services that are guided by a set of principles. These principles specify that services and supports should be *individualized*, *family focused*, and *culturally competent*. They should be *community based* and *accessible*, provided in the *least restrictive* environment possible, and provided through a *collaborative* and *coordinated interagency* network.

The report presents evaluation findings as of FY 2004 for the cohort of 45 communities initially funded in 1997, 1998, 1999, and 2000, except where noted.<sup>1</sup> Findings of change over time are reported as the change occurring among children from time of entry into services to subsequent data collection points. Because numeric change may vary in magnitude and implications for actual behavioral change are often difficult to interpret, the reliable change index (RCI),<sup>2</sup> a statistic comparing a child's score at two different time points, is used to assess whether individual behavioral and emotional change over time was clinically significant. Findings showing stability indicate that there was no clinically significant change over time. More information on the RCI is provided in Appendix E.

Outcomes data were assessed at intake, 6 months, 12 months, and 18 months for the overall sample and from intake to 6 months for a subsample to maximize the number of cases within each analysis.

### *To What Extent Do Children and Families' Outcomes Improve over Time?*

#### Clinical Outcomes

- **Behavioral and Emotional Problems Were Reduced:** After 18 months of receiving services, 49.4 percent of children showed a reduction in behavioral and emotional problems and 40 percent remained stable, as measured by the Child Behavior Checklist (CBCL).
- **Behavioral and Emotional Strengths Increased:** After 18 months in services, 44.7 percent of children showed an increase in behavioral and emotional strengths and 32.2 percent remained stable, as measured by the Behavioral and Emotional Rating Scale (BERS).
- **Clinical Functioning Improved:**<sup>3</sup> After 18 months in services, the percentage of children with marked functional impairment decreased 8.2 percent and those with severe functional impairment decreased almost 14 percent, indicating that children improved in functioning across time, as measured by the Child and Adolescent Functional Assessment Scale (CAFAS).

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<sup>1</sup> Findings from the evaluation of grant communities funded in 1993 and 1994 have been presented in previous Annual Reports to Congress (CMHS, 1996, 1997, 1998, 1999, 2000, 2001, 2003a).

<sup>2</sup> Jacobson, Roberts, Berns, & McGlinchey, 1999; Jacobson & Truax, 1991; Speer & Greenbaum, 1995.

<sup>3</sup> "Marked" to "severe" impairment designates major or persistent disruption to severe disruption in functioning.

## Functional Outcomes

- **School Performance and Attendance Improved:** Nearly 75 percent of children either improved or remained stable in school performance after 18 months in system of care services. During the same time period, almost 86 percent of children either improved or remained stable in school attendance.
- **Law Enforcement Contacts Decreased:** After receiving services for 18 months, the number of children with law enforcement contacts decreased by about 8 percent for those accused of a crime, arrested, convicted of a crime, and sentenced to probation. Law enforcement contacts decreased by almost 10 percent for those sent to detention or jail in the same time period.
- **School Disciplinary Actions Were Reduced:** After 18 months in services, the number of children who were suspended decreased from 44.1 percent to 30.0 percent and the number of children who were sent to detention decreased from 31.1 percent to 22.5 percent. Although a slight rebound in expulsions was evident at 18 months, the percentage of children who were expelled from school decreased from 7.0 percent to 4.0 percent. These represent one third or greater reductions.
- **Caregiver Strain Was Reduced:** Over two-fifths of caregivers of children served by systems of care reported a reduction from intake to 18 months in the strain associated with caring for a child with serious emotional disturbance. Nearly half of children remained stable during the same time period.
- **Caregivers Were Satisfied with Services:** Over 75 percent of caregivers rated their satisfaction with system of care services as high across a variety of dimensions after 18 months.

### ***What Are The Characteristics of Children and Families Entering Systems of Care?***

- **Clinical Diagnosis:** Of the children in the study, 36.5 percent entered with a diagnosis of attention-deficit/hyperactivity disorder (ADHD), 32.5 percent with mood disorders and depression, 26.9 percent with oppositional defiant disorder, and 4.1 percent with other diagnoses.
- **Co-Occurring Serious Emotional Disturbance with and without Substance-Related Disorders:** Of the children in the study, 53.2 percent had co-occurring mental health disorders. Of these, 87.0 percent had co-occurring mental disorders without a substance-related disorder, and 13.0 percent had co-occurring mental health disorders with a substance-related disorder.
- **Distinct Patterns of Presenting Problems for Boys and Girls:** Five distinct patterns of presenting problems were identified for boys and six patterns for girls. The majority of boys fell into three of the five classes identified: (a) youth with conduct problems and delinquency (38.1 percent), (b) youth who were hyperactive and had conduct and adjustment problems (23.4 percent), and (c) youth who had severe problems in most areas (26.6 percent). The majority of girls fell into two of the six classes identified: (a) youth with conduct problems and delinquency (35.4 percent), and (b) youth with depression (20.8 percent).

- **Chronic Physical Illness:** Of the children in the study, 37.9 percent suffered from asthma, 37.0 percent from allergies, 8.9 percent from head pain, and 8.6 percent from migraine headaches. A wide range of other physical conditions was found among children and youth in lesser proportions.

### *What Factors Influence Child Clinical Outcomes?*

- **Children’s Changes in Functioning Differed Significantly by Racial and Ethnic Background:** Functional impairment scores decreased significantly after 6 months in services within racial and ethnic categories, indicating that all children improved. However, there were significant differences in improvement between the different racial and ethnic groups from intake to 6 months. White children exhibited greater improvements in functional impairment than children in all other racial/ethnic groups.
- **Emotional and Behavioral Problems, Functioning, and Child’s Strengths in School- Referred Children Improved:** Almost 35 percent of children referred by schools reported significant improvements in emotional and behavioral problems, and 39.3 percent reported significant improvements in behavioral and emotional strength scores after 6 months in services, as measured by the BERS.<sup>4</sup> Improvements in school performance were exhibited by 35.0 percent of children after receiving services for 6 months. Regular school attendance increased significantly, from 77 percent of children at intake to 82 percent after 6 months in services. The number of children whose CAFAS score indicated marked to severe impairment decreased by 13.4 percent, the number of children with below average BERS strengths scores decreased by 5.2 percent, and the number of children with a CBCL Total Problems score in the clinical range decreased by 10.4 percent after 6 months in services.
- **Children with Co-Occurring Substance Abuse Disorders Improved or Remained Stable on Clinical Indicators and School Outcomes:** About 89 percent of children with a co-occurring substance abuse disorder either remained stable or exhibited a significant reduction in behavioral and emotional problems after 6 months in services, as measured by the CBCL. Slightly over 41 percent of children with a co-occurring substance abuse disorder showed significant improvements in children’s strengths, as measured by the BERS; an additional 38.7 percent of children remained stable. Similarly, almost 69 percent of children with co-occurring substance abuse diagnoses either remained stable or improved their school performance, and 29.3 percent exhibited significant improvement in school attendance.
- **Children with a History of Suicide Attempt or Suicide Ideation Improved at a Rate Similar to Those with No Such History:** Over 37 percent of children with a history of suicide attempts or suicidal ideation, 37.4 percent showed significant improvements in emotional and behavioral problems, as measured by the CBCL, after 6 months in services. The corresponding number for children with no known history of suicide attempts or ideation was 35.8 percent. Similarly, significant improvements in functional impairment, as measured by the CAFAS, were reported for 41.7 percent of children with a history of suicide attempts or suicidal ideation and 40.1 percent of children with no

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<sup>4</sup> The BERS identifies the emotional and behavioral strengths of children and focuses on strengths and resiliency. Child behavioral and emotional strengths are assessed in terms of interpersonal and intrapersonal relationships, family involvement, and school functioning.

known history of suicide attempts or ideation after 6 months in services. No differences were found in clinical changes between the two groups of children.

- **Children with Multiple Suicide Attempts Improved Significantly:** Significant differences were found in rates of change across groups of children with a history of suicide attempts: those with no suicide attempts, first-time attempts, previous attempts (but not referred for suicide attempt), and multiple attempts. Functional impairment was reduced for all four groups 6 months after beginning services; however, the largest difference in terms of lowered impairment levels was found by children who attempted suicide more than once. Specifically, the proportion of these children with moderate to severe levels of impairment decreased from 85.2 percent to 64.0 percent after 6 months of receiving services.
- **The Number of Children with More Severe Levels of Depression and a History of Suicide Attempt or Suicidal Ideation Decreased:** The number of children with a history of suicide attempts or suicidal ideation whose score on the CAFAS Mood and Self-Harm subscales indicated marked to severe functional impairment decreased by 13.7 percent after 6 months in services. The corresponding decrease among children with no known history of suicide attempts or ideation was 8.5 percent. The difference in the rates of change between the two groups was statistically significant.

### *What Is the Service Use of Children Participating in Systems of Care?*

- **Children Aged 5 and Younger Received Fewer Services than Older Children:** Younger children and their families received an average of 4.5 ( $SD = 2.7$ ,  $n = 243$ ) services after 6 months in systems of care, fewer than those received overall by children served in systems of care. The four services most frequently reported as received during the first 6 months in systems of care were assessment or evaluation, individual therapy, case management, and family support.
- **Service Use Differed Significantly for Children of Different Racial and Ethnic Groups:** On average, White children received six different types of services from intake to 6 months in services, representing the highest average number of services received among any racial and/or ethnic group. During the same time period, Hispanic children received an average of 5.9 different types of services, African American children 5.8, and American Indian children 5.3.
- **Fewer Rural Children Received Services Compared to Urban Children:** With the exception of behavioral therapeutic aide, transition services, afterschool care, and therapeutic foster care, a lower percent of rural children received services than urban children.

### *How Are Systems of Care Improving on Implementing System of Care Principles?<sup>5</sup>*

- **Systems of Care Improve over Time on Interagency Involvement, Coordination, and Collaboration:** Among communities funded in 1998 and 1999-2000, there is a meaningful trend toward improvement over time on how systems of care implemented

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<sup>5</sup> More information on the system of care assessment can be found in Appendix B.

interagency and coordination and collaboration principles. On a scale of 1 to 5, with 5 being the best, systems of care improved from the first to the third assessments from a mean score of 3.12 to 3.54 for interagency involvement, and from a mean score of 3.37 to 3.93 for coordination and collaboration.

- **Systems of Care Demonstrated Achievements in Interagency Involvement and Cross-Agency Coordination and Collaboration:** All system of care communities first funded in 1997–2000 and assessed in the 2003 fiscal year had cross-agency governance or planning bodies that included representation from public child-serving agencies such as mental health, child welfare, juvenile justice, and education. Just over one fourth also had representation from public health. In addition, all communities held regular and routine interagency meetings, provided case management or care coordination services to all children and families who participated in the program, and held routine interagency meetings for the purpose of individual child and family service planning.
- **System of Care Communities Have Improved over Time in Implementing Family-Focused, Individualized, and Accessible Care:** On a scale from 1 to 5, with 5 being the best, assessment ratings increased from the first to the third assessments from a mean score of 3.92 to 4.17 for family-focused care, from 3.65 to 3.94 for individualized care, and from 3.79 to 4.25 for accessible principles.

### *How Are Systems of Care Responding to the Goals and Key Focus Areas for Mental Health Transformation?*

#### Preventing Suicide

- **System of Care Communities Have Implemented Strategies for Suicide Prevention:** In the 2003 system of care assessment, 22 percent of 45 participating communities initially funded in 1997–2000 reported making program efforts specifically directed toward the prevention of suicide. Training was offered to grant-funded staff and service providers in 13 percent of communities on screening for suicide risk, implementing prevention interventions, and treating young people who had attempted suicide. Of the 45 communities assessed, 6 percent of communities reported an aggressive social marketing campaign that included public service announcements, a Web site to alert parents to early warning signs, and a newspaper article that allowed readers to perform a “self test” about the issue of suicide.

#### Reducing Stigma

- **System of Care Communities Have Made Efforts toward Stigma Reduction:** Of 45 communities participating in the 2003 system of care assessment, 64 percent have developed and disseminated brochures, pamphlets, fact sheets, and newsletters about mental illness directly to families through mass mailings and to service providers, community-based agencies, schools, places of worship, and doctors’ offices. Direct outreach was provided by 40 percent of communities to specific racial and ethnic communities located within their respective catchment areas. Of the communities assessed, 44 percent participate in community events such as local parades, health fairs, school fairs, and similar types of community-wide activities to distribute written materials and to be available to speak with children and families attending the events.

### Providing Consumer- and Family-Driven Care

- **System of Care Communities Have Implemented Family-Focused Care at the Infrastructure Level:** According to system of care assessment ratings, 89 percent of communities reported having family representatives involved in the governing body, and families comprised 16 percent of governing body members.
- **System of Care Communities Have Implemented Family-Focused Care at the Service Delivery Level:** Of the 45 communities initially funded in 1997–2000 participating in the 2003 system of care assessment, 94 percent reported that families were involved in the service planning process. Examples of their involvement included identifying and choosing service options, identifying goals and objectives, selecting and rejecting participants for the service planning process, and rejecting service options. Many communities also reported that families had the final say in service planning and that the plan of care was not official until a family member signed off on it. Additionally, 75 percent of systems of care reported that their families felt respected and comfortable during the intake process.

### Eliminating Disparities

- **Caregivers Are Satisfied with Provider Efforts To Provide Culturally Competent Practices:** After receiving services for 1 year, more than 75 percent of caregivers reported they were satisfied with providers' respect for their family's beliefs and values about mental health, understanding of their family's traditions, and ability to find services that acknowledge the positive traditions of their family's culture and tradition.
- **Systems of Care Are Achieving Diversity in Staff, but Need Greater Diversity in Governing Bodies:** Diverse system of care communities (i.e., those serving populations that are at least 26 percent non-White) have been successful at hiring diverse program staff. In urban communities, 90 percent have achieved diversity in program staff, whereas 25 percent have achieved diversity in governing bodies. In rural non-American Indian communities, 60 percent have achieved diversity in program staff, and 25 percent have achieved diversity in governing bodies.

### Focusing on Early Childhood

- **Caregiver Strain among Caregivers of Children Aged 5 and Younger Was Reduced from Intake to 6 Months after Service Entry:** Data collected with the Caregiver Strain Questionnaire show that 22.6 percent of caregivers reported significant reductions in global strain, and global strain for 69.7 percent of caregivers remained stable. These findings did not differ from those of older children.

### *How Have Research and Technology Informed and Improved Mental Health Services for Children in Systems of Care?*

### Employing Evidence-Based Practices

- **There Is a Large Discrepancy between Perceived Effectiveness of Evidence-Based Practices and Use among Direct Service Providers:** Among 615 mental health direct service providers surveyed, evidence-based practices (EBPs) were considered to result in positive outcomes for children and families. However, with the exception of Cognitive Behavioral Therapy (CBT), user rates among those who perceived a practice effective

were relatively low (i.e., 67.5 percent of those who perceived CBT as effective identified it as one of their three EBPs primarily used), and ranged from 1 percent (self-control instruction training) to 21.6 percent (wraparound).

- **Agencies Did Not Require Use of Evidence-Based Practices:** Among survey respondents, 62 percent indicated that their agencies did not require the use of EBPs. However, respondents employed by child welfare agencies indicated the highest level of agency-required use of EBPs (66.7 percent). A similarly large percentage of juvenile justice employees also indicated required use of EBPs (66.7 percent).

### Conducting Comparison Studies With Non-System of Care Communities

- **Children Participating in Systems of Care Decreased Their Juvenile Justice Involvement Compared to a Non-System of Care Community:** In a matched-comparison study, the proportion of children charged with crimes in the sample system of care community decreased significantly by 20.3 percent after 18 months in services; the proportion of children charged with crimes in the comparison community increased by 4.2 percent during that same period, although the increase was not statistically significant. In the system of care community, children were most likely to be charged with status offenses (18.8 percent) such as truancy, running away, and uncontrollable/ungovernable behavior, followed by offenses that represent danger to persons (12.4 percent) and offenses involving damage to property (9.8 percent). In the comparison site, charges of theft were most likely to occur (22.2 percent), followed by damage to property (19.4 percent) and offenses involving danger to persons (18.1 percent).

### Using Technology to Improve Care

- **System of Care Communities Have Used the Internet as a Means of Disseminating Information to Consumers of Services:** Of communities surveyed, 67 percent have created Web sites for information dissemination. The most common element across the Web sites was contact information that included telephone numbers (87.5 percent), postal addresses (75.0 percent), e-mail addresses (66.7 percent), and contact names (50.0 percent). Numerous external links to additional Internet resources were featured in 75 percent of the Web sites. Among the most common external links were CMHS, SAMSHA, and State Departments of Health and Human Services. Program eligibility information was presented on 58 percent of community Web sites, and 33 percent of the sites presented information on service access.
- **Analysis of Cross-Agency Data Integration or Sharing Indicates that 61.1 Percent of the Communities Can Access at Least One Management Information System (MIS):** Most of the communities (90.9 percent) with access to data from other agencies have used at least one of these databases. In terms of access to data from specific agencies, 57.1 percent of the communities can access mental health data, approximately 25 percent can access juvenile justice data, 22.6 percent can access social service data, about 17 percent have access to education data, and a little over 10 percent can access physical health data.

## Who Are the Children and Families Participating in Systems of Care?

### 1997–98 Funded Communities

- **Gender:** Of the children in the study, 66 percent were boys and 34 percent were girls.
- **Average Age:** The average age of children in the study was 11 years: 19 percent were aged 5 years or younger, 25 percent were aged 6 to 11 years, 38 percent were aged 12 to 15 years, and 18 percent were aged 16 years or older.
- **Race/Ethnicity:** Of the children in the study, 54 percent were White, 24 percent were African American, 9 percent were Hispanic, 7 percent were American Indian or Alaska Native, 1 percent were Asian/Native Hawaiian, and 5 percent were multiracial or of other ethnicities.
- **Family Custody:** Of the children in the study, 45 percent were in their mother’s custody, 26 percent were in the custody of both parents, 4 percent were in the custody of fathers, 4 percent were in the custody of adoptive parents, 10 percent were in the custody of foster parents or were wards of the State, 6 percent were in the custody of grandparents, and 6 percent were in other types of custody.
- **Family Poverty:** Data on family incomes showed that 56 percent of caregivers reported incomes below the poverty threshold, 14 percent were at poverty, and 30 percent were above poverty according to poverty guidelines by family household size.<sup>6</sup>

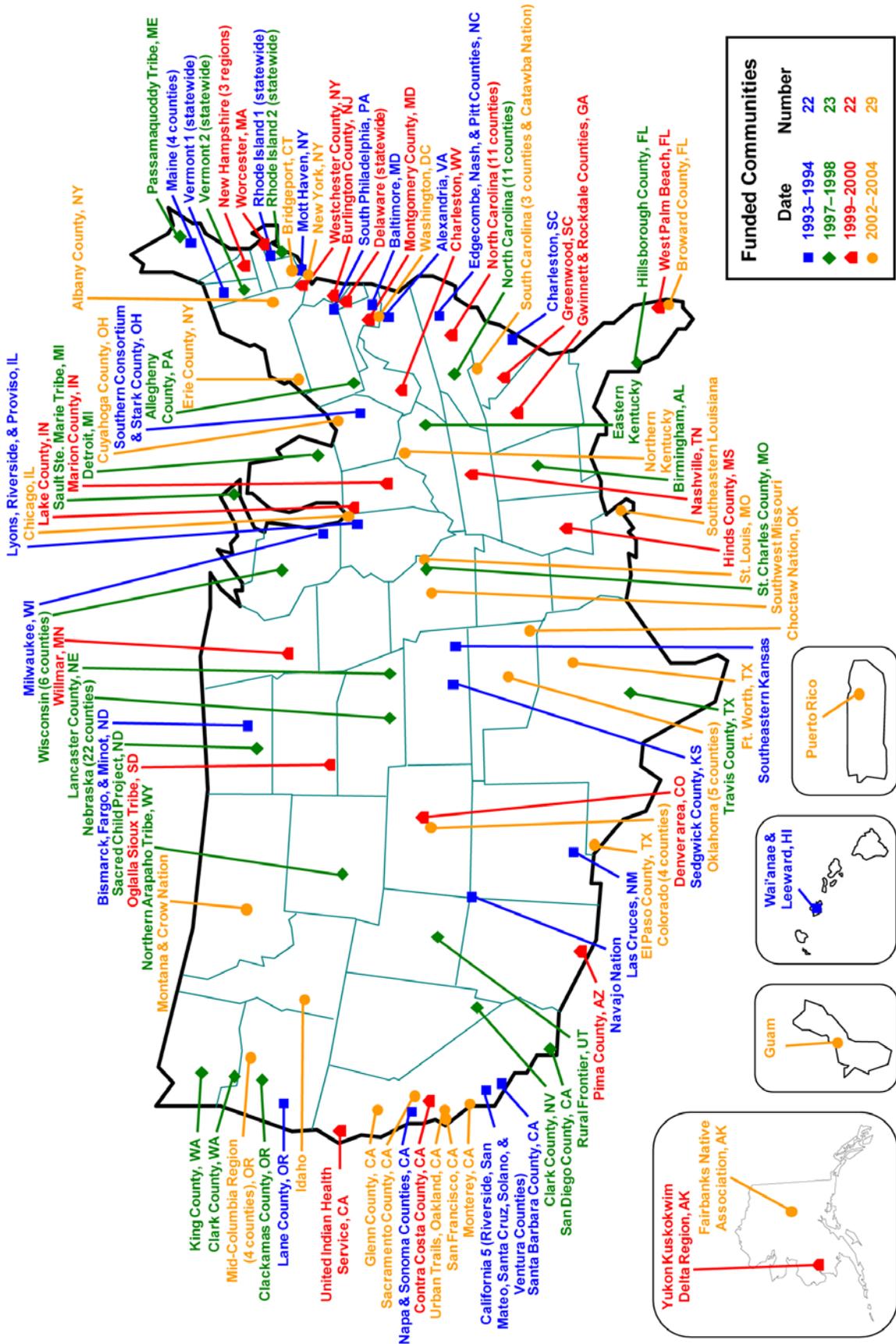
### 1999–2000 Funded Communities

- **Gender:** Of the children in the study, 67 percent were boys and 33 percent were girls.
- **Average Age:** The average age of children in the study was 12.2 years: 4 percent were aged 5 years or younger, 33 percent were aged 6 to 11 years, 46 percent were aged 12 to 15 years, and 17 percent were aged 16 years or older.
- **Race/Ethnicity:** Of the children in the study, 48 percent were White, 30 percent were African American, 8 percent were Hispanic, 9 percent were American Indian or Alaska Native, 1 percent were Asian/Native Hawaiian, and 4 percent were multiracial or of other ethnicities.
- **Family Custody:** Of the children in the study, 42 percent were in their mother’s custody, 24 percent were in the custody of both parents, 4 percent were in the custody of fathers, 5 percent were in the custody of adoptive parents, 11 percent were in the custody of foster parents or were wards of the State, 7 percent were in the custody of grandparents, and 7 percent were in other types of custody.
- **Family Poverty:** Data on family incomes showed that 56 percent of the caregivers reported incomes below poverty, 10 percent were at poverty, and 34 percent were above poverty according to poverty guidelines by family household size.

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<sup>6</sup> The poverty threshold of \$18,500 for a family of four according to the *2002 Health and Human Services Poverty Guidelines* (U.S. Department of Health and Human Services, 2004).

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



## INTRODUCTION

Since 1993, the Comprehensive Community Mental Health Services for Children and Their Families Program (Children’s Mental Health Initiative, or CMHI) has funded communities to establish a comprehensive mental health service system. The CMHI, in its eleventh year in 2004, promotes the development of systems of care to improve the lives of children with serious emotional disturbance and their families, by providing grants or cooperative agreements to States, communities, territories, American Indian tribes, and Alaska Native communities. The program’s authorizing legislation (Public Law 102-321, Part E, Title V, Sections 561-565 of the Public Health Service Act) requires that an annual report be made to Congress summarizing an evaluation of the program that is conducted in each previous fiscal year. This 2004 Report to Congress presents evaluation findings for the program in Federal FY 2004.

### **System of Care Philosophy**

The system of care approach, first articulated by Stroul and Friedman (1986) for the Child and Adolescent Service System Program (CASSP) established in 1984, provides a theoretical underpinning for the CMHI and calls for a comprehensive spectrum of mental health services and other support services that are guided by a set of principles. These principles specify that services and supports should be *individualized, family focused, and culturally competent*. They should be *community based* and *accessible*, provided in the *least restrictive* environment possible, and provided through a *collaborative* and *coordinated interagency* network. See Table B-2 in Appendix B for more information on the system of care principles. Through the use of both public and private funding to implement the framework in local communities, the concept of a system of care for children’s mental health has been transformed from a vision of what could be into a reality. The system of care approach has become the cornerstone of many children’s mental health service delivery programs across the country.

### **Program Administration**

The CMHI is an ongoing program that is funded and administered by the Center for Mental Health Services (CMHS) of the Substance Abuse and Mental Health Services Administration (SAMHSA), Child, Adolescent and Family Branch (CAFB).

Between 1993 and September 30, 2004, the CMHI awarded 67 grants and 29 cooperative agreements in funding cycles (1993–1994, 1997–1998, 1999–2000, 2002–2004) to States, local governments, and American Indian/Alaska Native tribes for at least 5 years each (cooperative agreements from 2002 forward were for 6 years each). Each of the funding cycles provided an opportunity for communities to develop and refine the system of care program model, building upon the experience of previously funded communities (see map, page 9, and list of funded communities, Appendix A). By 2004, the initial \$5 million investment in four communities funded in 1993 had grown to \$102 million per year, for a total investment of just over \$852 million, the largest Federal investment ever in community-

based mental health services for children and their families. Through September 30, 2004, the CMHI has served over 67,413 children and their families nationwide.<sup>7</sup>

As outlined in the program's authorizing legislation, each grant and cooperative agreement has an increasing match requirement. Initially, \$1 of community funding is matched with \$3 of Federal funding. This match is increased to a \$1 for \$1 match in the fourth year, and to \$1 of Federal funds for every \$2 of community funds in the fifth and sixth years. Five-year grants had a similar increasing match requirement beginning in the third funding year.

### **Purpose of the Program**

The CMHI, based on the system of care concept and philosophy, provides an opportunity to examine, develop, and refine approaches toward identifying those in need so that successful outcomes for children and their families can be achieved. Children enrolled in the program range in age from birth to age 21 and currently have, or at any time during the past year had, a mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified in the *Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition (DSM-IV)*; American Psychiatric Association, 1994), that resulted in functional impairment that substantially interferes with or limits one or more major life activities. Because of the diverse array of communities and populations, funded system of care programs provide excellent learning opportunities for using evidence-based treatments, confronting mental health disparities, working and pulling resources together across child-serving agencies, creating unique service options, and finding ways to sustain systems of care.

Since its inception, the program has maintained a strong evaluation component which demonstrates program effectiveness. Mandated as part of the statute that established the program (the ADAMHA Reorganization Act, Pub. L. 102-321), each funded grant community has actively participated in both national and local evaluation efforts. As the program has matured, comprehensive reports of evaluation results have become publicly available (CMHS, 1997, 1998, 1999, 2000, 2001, 2003a). Improvements in program outcomes as evidenced by the Government Performance and Results Act (GPRA) indicators are noteworthy.<sup>8</sup> GPRA indicators such as increased cross-agency treatment planning, increased school attendance, decreased law enforcement contacts, and decreased use of inpatient hospitalization across program years demonstrate program achievements through the years.

### **Program Theory Model**

Figure 1 depicts a *theory-based framework* to describe the program that was developed with input from partners across the country. The framework articulates the underlying assumptions that guide a service delivery strategy and are believed to be critical to producing change and improvement in children and families. The framework has four core elements—program context, guiding principles, strategies, and outcomes—as well as an evaluation-and-feedback cycle.

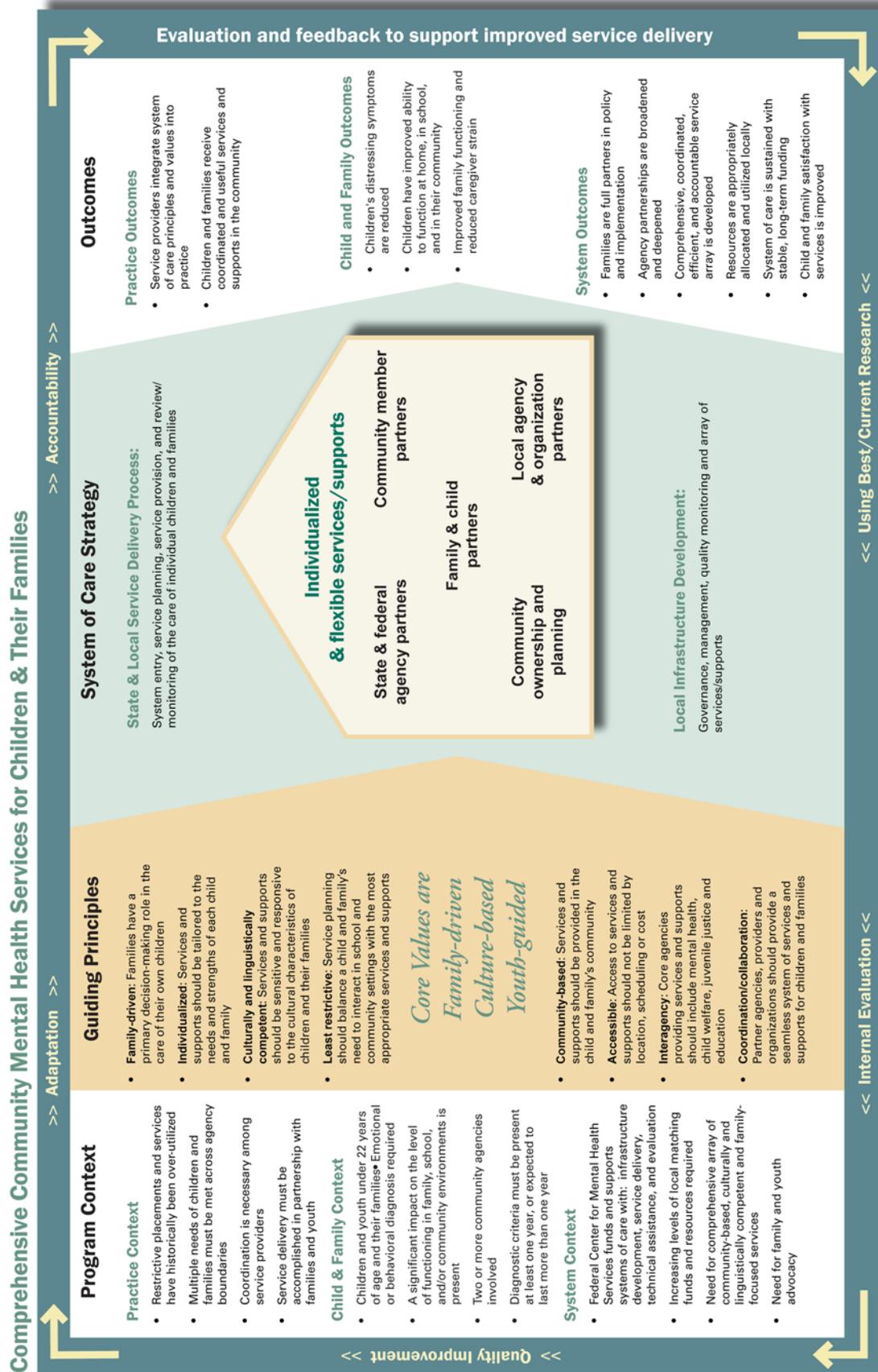
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<sup>7</sup> Appendix A lists all funded system of care communities. As of FY 2007, the total program funding increased to \$1.16 billion, and the program served over 85,647 children and their families.

<sup>8</sup> See page 66 for GPRA findings.

The model and guiding principles provide a foundation upon which system of care strategies are built. These strategies are grounded in a community ownership and planning process that engages the multiple partners in work to improve the well-being of children and families. As depicted in the far right of the framework, the outcomes are organized into practice, child and family, and system categories. Finally, the framework includes an evaluation-and-feedback cycle that uses the best and most current research and incorporates concepts of internal evaluation, quality improvement, adaptation, and accountability to ensure that the program goals are being accomplished.

Figure 1. System of Care Theory-Based Framework



# NATIONAL EVALUATION OF THE COMPREHENSIVE COMMUNITY MENTAL HEALTH SERVICES FOR CHILDREN AND THEIR FAMILIES PROGRAM

The evaluation, mandated by Section 565(c) of the Public Health Service Act, is an important component of the CMHI that examines all areas described above and addresses critical and emerging issues in children’s mental health. The findings from the evaluation provide information upon which to base future treatment, program funding, and policy decisions to transform the current system. The core components of the evaluation include the studies listed in Table 1.

**Table 1. Core Components of the National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program**

<ul style="list-style-type: none"> <li>• <b>System of care assessment study</b> examines whether programs have been implemented according to system of care program theory and documents how systems develop over time to meet the needs of the children and families they serve.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Cross-sectional descriptive study</b> describes the children enrolled in the funded systems of care and comparison sites in terms of their demographics, functional status, living arrangement, diagnosis, risk factors, and mental health service history.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Child and family outcomes study</b> examines how the system affects child clinical and functional status and family life. Outcome data are used to assess change over time in symptomatology, diagnosis, social functioning, substance use, school attendance and performance, delinquency, and stability of living arrangements.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Services and costs study</b> describes the types of services used by children 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 (MIS).</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Service experience study</b> examines data of services received and child and family ratings of satisfaction with services provided.</li> </ul>

In addition to the core study components, as issues emerge and the need to refine strategies becomes apparent, other studies are added to the evaluation. Ongoing studies added to the evaluation through September 30, 2004, are presented in Table 2.

**Table 2. Ongoing Current Studies Added to the National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program**

<ul style="list-style-type: none"> <li>• <b>Treatment effectiveness studies</b> examine the effectiveness of a specific evidence-based treatment provided to a selected group of children with specific diagnoses served within CMHS-funded systems of care.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Evidence-based treatment survey</b> assesses the mental health clinician’s knowledge, training, and use of evidence-based treatments in their practice. The survey was designed as a Web-based survey; however, hard copies of the survey were available upon request.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Family-driven study</b><sup>9</sup> examines how families experience systems of care. The study is led and driven by family members, including the development of concepts, methods, and research strategies.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Sustainability study</b><sup>8</sup> explores the extent to which systems of care are maintained after funding from the CMHI grant program 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 systems of care developed with grant support.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Wraparound fidelity study</b> examines the service mechanisms and outcomes associated with the wraparound process. The goal of the study is to expand knowledge about service delivery processes, reliable and valid wraparound fidelity and quality assurance measures, and an adequate research base, to support future randomized clinical trials of the effectiveness of the wraparound approach.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Primary care study</b><sup>10</sup> investigates the role of primary health care providers in systems of care and examines the impact of services provided within primary care on child and family outcomes.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Culturally competent practices study</b><sup>10</sup> assesses system of care service providers’ level of competence across several domains of cultural competence, including the role that organizations and agencies play in hindering or facilitating culturally competent service provision.</li> </ul>

Detailed descriptions of the studies described in Tables 1 and 2 can be found in Appendix B.

## ABOUT THIS REPORT

The purpose of the 2004 Annual Report to Congress is to describe the characteristics, service use, and outcomes of children and families served in systems of care in the context of the New Freedom Commission (NFC) goals for transforming the mental health system. The 2004 Annual Report to Congress presents evaluation findings as of FY 2004 from the cohort of 45 communities funded in 1997, 1998, 1999, and 2000, except where noted.<sup>11</sup> Findings draw on the data collected since the start of each cohort’s funding and represent what is known about these actively funded cohorts as of September 30, 2004. The number of individuals represented in the results included in the report vary based on the study component in which the data were collected, the amount of attrition or loss to follow-up (for

<sup>9</sup> Data collection is ongoing for the family-driven study and the sustainability study; findings are not yet available.

<sup>10</sup> The primary care and culturally competent practices studies were added to the national evaluation in 2003 and are being developed currently.

<sup>11</sup> Findings from the evaluation of grant communities funded in 1993 and 1994 have been presented in previous Annual Reports to Congress (CMHS, 1996, 1997, 1998, 1999, 2000, 2001, 2003a).

longitudinal results), and in some instances analyses conducted using subsets of the original sample.

Findings from six types of evaluation data are presented, as follows:

- Outcomes data based on children assessed at intake, 6 months, 12 months, and 18 months for the overall sample, and intake to 6 months for the subsample focusing on NFC goals. Outcomes measures applied in the evaluation included—but were not limited to—an assessment of the child’s clinical and social functioning, strengths, school attendance and performance, contact with law enforcement (consistent with the National Outcomes Measurement System (NOMS) performance indicators), and strains experienced by caregivers of children with serious emotional disturbance.<sup>12</sup> These were coupled with an assessment of services received and youth and family ratings of satisfaction with services provided.
- Descriptive data (e.g., demographic information, diagnostic status, functional characteristics, and referral sources) obtained at the time children in system of care communities entered services.
- Service system data collected during multiple years through system-wide and family assessments of service delivery in system of care communities.
- Comparison data obtained from communities with system of care grants and communities without these grants to examine and compare the communities on child and family outcomes, service systems, and service experience.
- Data gathered from direct mental health service providers about their knowledge and training, perceived effectiveness, practice, and employer support of evidence-based treatments.
- Data gathered to describe the types of services used by children and families and their associated costs. Information is gathered also from communities on Internet use and MIS capabilities and integration.

The analyses examining the characteristics of children who remain in the child and family outcomes study versus those who do not indicate several statistically significant differences. Those who remain in the outcomes study at 18 months are younger, more likely to be male, and more likely to be White; have a greater number of family risk factors, and have more behavioral and emotional problems. Therefore, results found for long-term outcomes are more likely to be generalized to children who have these characteristics. Children with more risk factors and greater behavioral and emotional problems are the children targeted by the program.

The format used to report findings is to present a brief finding followed by its corresponding graph where appropriate. Findings of change over time are reported as the change occurring among children from time of entry into services to subsequent data collection points. The

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<sup>12</sup> Instruments typically used in the field of children’s mental health, including the Child Behavior Checklist (CBCL; Achenbach, 1991), the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990), and the Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1998) were used to collect these data. See Appendix D for a complete description of all measures used to collect the data used in this report.

clinical and program outcome findings were reported to 6 months after service intake in order to maximize the number of cases within each analysis. Findings across various outcome measures through 30 months after intake can be found in Appendix C.

## CHARACTERISTICS OF PROGRAM CHILDREN

### ***Children and Families Served in Grant Communities Funded in 1997, 1998, 1999, and 2000 Are Predominantly Male, Ethnically Diverse, and Poor***

The system of care program targets children served in the public sector and provides grants and cooperative agreements to ethnically and geographically diverse communities.

- ***About two-thirds of children with serious emotional disturbance served were boys.***
  - Specifically, 66.2 percent of the children were boys and 33.8 percent were girls.
- ***Nearly half of the children were in early adolescence.***
  - The children's average age was 11.4 years.
- ***A diverse racial–ethnic population was served.***
  - Slightly less than half of children served were non-White. About 26 percent were African Americans, over 8 percent were of Hispanic ethnicity, over 8 percent were American Indian or Alaska Native, nearly 1 percent were Asian or Native Hawaiian, and about 4.6 percent were identified as other race or multiracial.
- ***The majority of families were poor.***
  - About 67 percent of children came from families living at or below poverty level, taking into account family income and household size based on the 2004 U.S. Department of Health and Human Services poverty guidelines (DHHS, 2004).

These demographic characteristics of children served in systems of care provide a brief profile of the children reached by programs supported by the CMHI. Boys are more often identified for services for a serious emotional disturbance, although there are indications that girls may be under-referred to treatment because their symptoms may be more likely to go unnoticed (Walrath et al., 2004). The findings also show that higher percentages of ethnic minority children and poor families are overrepresented in the system. Program goals have been focused on reaching underserved populations and delivering services through public-sector mental health agencies.

**Table 3. Child and Family Demographic Characteristics: Overall Sample**

<b>Gender</b> (N = 17,843)	
Male	66.2%
Female	33.8%
<b>Age</b> (N = 17,752)	
Mean	11.4 years
0–5 years	14.1%
6–11 years	27.5%
12–15 years	40.5%
16 years or older	18.0%
<b>Race and Ethnicity</b> (N = 14,482)	
African American	26.3%
American Indian	8.1%
Asian/Native Hawaiian	0.9%
Hispanic Ethnicity	8.2%
White	51.8%
Other	0.6%
Multiracial	4.0%
<b>Custody</b> (N = 14,571)	
Two parents	25.2%
Mother	43.5%
Father	4.3%
Adoptive parent(s)	4.1%
Foster parent(s) OR Ward of State	10.4%
Grandparents	6.4%
Other	6.1%
<b>Poverty Level<sup>a</sup></b> (N = 8,952)	
Below Poverty	58.6%
At Poverty	8.6%
Above Poverty	32.9%

<sup>a</sup> Poverty categories take into account both family income and household size and are based on the 2004 U.S. Department of Health and Human Services poverty guidelines. According to these guidelines, a family of four is living in poverty if their income is below \$18,850.

## Boys and Girls Enter Services with Differences in Presenting Problems

Children’s presenting problems at intake are a key indicator of their service needs because these problems led to their referral to services. The effort to provide individualized services to meet the needs of children and their families begins with the identification of differences in the patterns of these presenting problems, examination of factors impacting these differences, and the impact these differences have on service experiences (if any).

To examine different patterns of presenting problems, a latent class analysis (LCA) was conducted with presenting problems used as indicators to derive class membership. LCA is a statistical method for finding subgroups of related individuals based on patterns of responses to categorical indicators (see Tables E-1 and E-2 in Appendix E for model fit). Separate LCAs were conducted for boys and girls to examine the possibility that presenting problems classes might be different for boys and girls (see Tables E-3 and E-4 in Appendix E for class membership probabilities).

Service use in the first 6 months after entry into the program varied systematically by group for children, suggesting that variation in service use was related to children’s different needs at entry into services. Boys and girls were found to have different patterns of presenting problems when entering system of care services, based upon statistical modeling procedures.

Table 4 presents four distinct subgroups of boys based upon different patterns of presenting problems at intake. The majority of boys fell into three of the four subgroups: (a) conduct problems with delinquency (37.3 percent), (b) severe problems in most areas (25.8 percent), and (c) hyperactivity with conduct and adjustment problems (22.6 percent).

**Table 4. Descriptions of Four Subgroups for Males**

Subgroup	%	Presenting Problems
1	37.3	<b>Conduct problems with delinquency</b> , moderate probability of endorsing adjustment and other problems
2	25.8	<b>Severe problems in most areas</b> , including externalizing and internalizing problems, highest probability of endorsing all problems
3	22.6	<b>Hyperactivity with conduct and adjustment problems</b> , moderate probability of endorsing depression and delinquency
4	14.3	<b>Depression with adjustment and other problems</b> , lowest probability of endorsing conduct and delinquency problems

Table 5 provides information about the patterns of presenting problems at intake for girls. Seven distinct subgroups were identified for girls, with the majority falling within two of the seven subgroups: (a) conduct problems (23.9 percent) and (b) depression (23.1 percent). The patterns of presenting problems exhibited by girls varied substantially from the patterns presented by boys.

**Table 5. Descriptions of Seven Subgroups for Females**

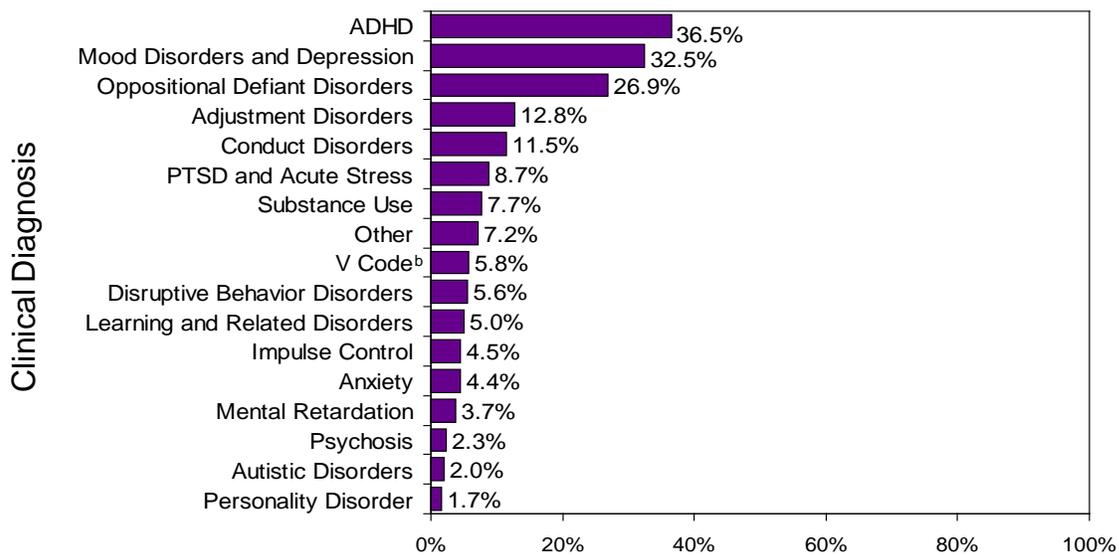
Subgroup	%	Presenting Problems
1	23.9	<b>Conduct problems</b> , with a moderate probability of delinquency and adjustment problems
2	23.1	<b>Depression problems</b> , moderate probability of suicidality, conduct, delinquency, adjustment, and other problems
3	13.1	<b>Adjustment problems with hyperactive, depression, and conduct problems</b> ; low probability of suicidality, delinquency, and other problems
4	11.8	<b>Conduct problems with delinquency and adjustment</b> , high probability of endorsing hyperactive problems, moderate depression, and other problems
5	11.5	<b>Severe problems in most areas</b> , both internalizing and externalizing, highest probability of endorsing suicidality and depression problems
6	7.0	<b>Delinquency problems</b> , with a low probability of endorsing all other problem categories
7	4.3	<b>Other problems</b> , including threat to life of others, strange behavior, and other problems (e.g., family issues/conflict, etc.)

The findings regarding differences in the ways boys and girls are served in systems of care add to a growing body of literature on gender differences in children’s referral for mental health services, diagnosis, treatment planning, and service use (Cuffe, et al., 2001; Garland & Zigler, 1994; Green & Clopton, 1996; Liao, Manteuffel, Paulic, & Sondheimer, 2001; Stanard, 2000; Walrath, et al., 2004), and they have important implications for service planning and delivery in systems of care. Understanding the differences between boys and girls in the various presenting problems classes identified can help providers develop services that are tailored to meet the specific needs of children served in systems of care.

## Children and Youth Present with a Diverse Set of Clinical Diagnoses at Intake

The Comprehensive Community Mental Health Services for Children and Their Families Program serves children and youth who have serious emotional disturbance. Among 11,366 children and youth served by the program among communities funded 1997–2000 for whom data were available in FY 2004, the most commonly diagnosed behavioral disorder upon intake into the program was attention-deficit/hyperactivity disorder (ADHD; 36.5 percent), followed by mood disorders and depression (32.5 percent) and oppositional defiant disorder (26.9 percent), a proportional order that reflects the general population. See Figure 2 for results.

Figure 2. Clinical Diagnosis on Any Axis at Intake<sup>a</sup>



Number of children = 11,366.

<sup>a</sup> Because children may have more than one diagnosis, the percentages may sum to more than 100%.

<sup>b</sup> V Code refers to Relational Problems, Problems Related to Abuse or Neglect, and additional conditions that may be a focus of clinical attention.

### **Many Children Enter Services with Co-Occurring Mental Disorders with and without Substance-Related Disorders**

Among the children for whom diagnostic information was available ( $n = 11,323$ ) in FY 2004, over half (53.2 percent) had co-occurring mental disorders. Of these, 87.0 percent had co-occurring mental disorders without a substance-related disorder, and 13.0 percent had co-occurring mental disorders with a substance-related disorder.

For children with co-occurring mental health disorders without substance-related disorders, 66.4 percent were assigned two *DSM-IV* diagnoses, 30.0 percent were assigned three diagnoses, and 3.6 percent were assigned four or more diagnoses. For children with a co-occurring substance-related disorder, the distributions were similar (60.1 percent, 35.9 percent, and 4.0 percent, respectively).

**Table 6. Distribution of Seven DSM Diagnoses by Co-Occurring Status**

<i>DSM-IV</i> Diagnosis <sup>a</sup>	Co-Occurring Without Substance-related Disorder ( $n = 5,247$ )	Co-Occurring With Substance-related Disorder ( $n = 782$ )
<b>ADHD</b>	54.7%	13.3%
<b>Mood Disorder</b>	43.1%	28.4%
<b>Oppositional Defiant Disorder</b>	40.4%	25.2%
<b>PTSD</b>	13.4%	6.8%
<b>Conduct Disorder</b>	12.9%	34.0%
<b>Adjustment Disorder</b>	11.9%	8.1%
<b>Disruptive Behavior Disorder</b>	6.6%	7.5%

<sup>a</sup> Since children were assigned more than one *DSM-IV* diagnosis, the percentages within each group will sum to greater than 100%.

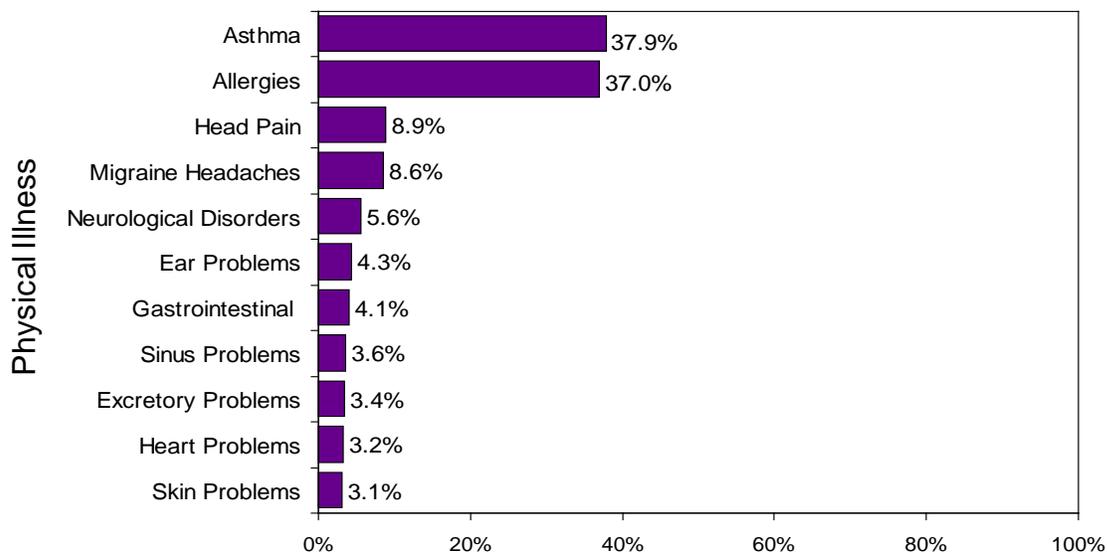
As seen in Table 6, the distribution of seven high-frequency *DSM* diagnoses are somewhat similar for the ranking of the top three most frequent diagnoses between the two groups of children. Mood disorder and oppositional defiant disorder were the second and third most frequent *DSM* diagnoses in both groups. However, the groups differed with regard to ADHD, which was the most frequent *DSM* diagnosis for children with comorbid mental disorders, and conduct disorder, which was the most frequent mental disorder assigned to children with a comorbid substance-related disorder.

## Over One-Third of Participating Children and Youth Report Suffering from Chronic Physical Illnesses

Chronic physical health concerns appear to be a common experience among children and youth. Using a broad definition of chronic illness, as many as 31 percent of children have been identified as having chronic health conditions (Newacheck & Taylor, 1992). As many as 6.5 percent of children experience at least some limitation in activities such as school attendance and play due to chronic physical illness, and up to 18 percent of this group experience parent-reported fair or poor health (Newacheck & Halfon, 1998). Chronic diseases and injuries (as opposed to physical impairments) are the main causes of 61 percent of activity limitations, with respiratory diseases such as asthma being among the most common. Twelve percent of children and youth have been diagnosed with asthma and 12 percent have respiratory allergies (Bloom, Cohen, Vickerie, & Wondimu, 2003; Dey, Schiller, & Tai, 2004; National Institute for Occupational Safety and Health [NIOSH], 2003).

Figure 3 indicates that children and youth with physical illnesses participating in systems of care initially funded in 1997–2000 most frequently suffered from asthma (37.9 percent) and allergies (37 percent). Caregivers reported that their children and youth suffered from head pain (8.9 percent) and migraine headaches (8.6 percent). A wide range of other physical conditions was found among children and youth in lesser proportions.<sup>13</sup>

**Figure 3. Physical Illnesses Found among Children and Youth Served by the Comprehensive Community Mental Health Services for Children and Their Families Program<sup>a</sup>**



Number of children = 4,814.

<sup>a</sup>Because children may have more than one diagnosis, the percentages may sum to more than 100%.

<sup>13</sup> For findings related to the effect of chronic conditions and child and family risk factors on clinical impairment, see Table E-5 in Appendix E.

### ***Children in Different Racial and Ethnic Groups Vary in Numbers and Types of Services Received***

The average number of services received after 6 months in systems of care among communities initially funded in 1997–2000 differed significantly among racial and ethnic groups.<sup>14</sup> On average, White children received six different types of services from intake to 6 months, representing the highest average number of services received among any racial and ethnic group. During the same time period, Hispanic children received an average of 5.9 different types of services, African American children 5.8, and American Indian children 5.3, the smallest average number of services among racial and ethnic groups.<sup>15</sup> Post-hoc analysis revealed significant differences between White and American Indian children specifically.<sup>16</sup>

Furthermore, racial and ethnic groups reported significantly different service utilization patterns from intake to 6 months. The groups differed significantly on 11 of 23 types of services analyzed (see Table 7<sup>17</sup>). The findings indicate that American Indian and African American children comprised the smallest percentage of service recipients in 10 of the 11 services. White children were the highest consumers of services for 5 of the 11 services, more than any other racial and ethnic group. Implications from these findings indicate that racial and ethnic disparities may be evident in the service delivery of systems of care. The number of types of services accessed by children in different ethnic groups may correspond with levels of impairment. Among the children in the sample, American Indian children had the lowest impairment levels (see Figure 14), and thus received the fewest number of services.

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<sup>14</sup>  $F = 3.5, df = 3/3,607, p < .05$ .

<sup>15</sup> Due to the limited number of children, Asian and Native Hawaiian children were not included in these analyses.

<sup>16</sup>  $p < .05$  for multiple comparisons.

<sup>17</sup> Only services with significant results are presented.

**Table 7. Types of Services Used by Racial and Ethnic Groups**

Services	American Indian (%)	African American (%)	Hispanic (%)	White (%)
Crisis Stabilization <sup>a</sup>	19.8 (n = 126)	16.3 (n = 823)	19.7 (n = 446)	22.0 (n = 2,189)
Medication Monitoring <sup>b</sup>	34.1 (n = 126)	60.5 (n = 820)	60.7 (n = 448)	68.4 (n = 2,195)
Individual Therapy <sup>c</sup>	79.2 (n = 125)	70.7 (n = 817)	75.2 (n = 443)	80.5 (n = 2,197)
Family Therapy <sup>d</sup>	35.7 (n = 126)	33.7 (n = 820)	44.0 (n = 443)	39.0 (n = 2,194)
Family Preservation <sup>e</sup>	20.0 (n = 125)	12.4 (n = 817)	15.9 (n = 447)	16.0 (n = 2,178)
Case Management <sup>f</sup>	62.4 (n = 125)	77.2 (n = 821)	73.8 (n = 442)	78.6 (n = 2,189)
Behavioral Therapeutic Aide <sup>g</sup>	15.1 (n = 126)	17.7 (n = 820)	13.0 (n = 446)	20.1 (n = 2,191)
Transportation <sup>h</sup>	19.8 (n = 126)	29.6 (n = 820)	27.8 (n = 446)	20.1 (n = 2,183)
Flexible Funds <sup>i</sup>	20.2 (n = 124)	21.2 (n = 808)	28.0 (n = 439)	24.2 (n = 2,165)
Inpatient Hospitalization <sup>j</sup>	4.0 (n = 126)	12.3 (n = 820)	7.6 (n = 446)	10.5 (n = 2,193)
Therapeutic Group Home <sup>k</sup>	4.0 (n = 125)	6.8 (n = 820)	9.9 (n = 446)	6.0 (n = 2,197)

<sup>a</sup>  $\chi^2 = 12.1, df = 3, p < .01$ .  
<sup>b</sup>  $\chi^2 = 74.1, df = 3, p < .001$ .  
<sup>c</sup>  $\chi^2 = 34.1, df = 3, p < .001$ .  
<sup>d</sup>  $\chi^2 = 14.4, df = 3, p < .005$ .

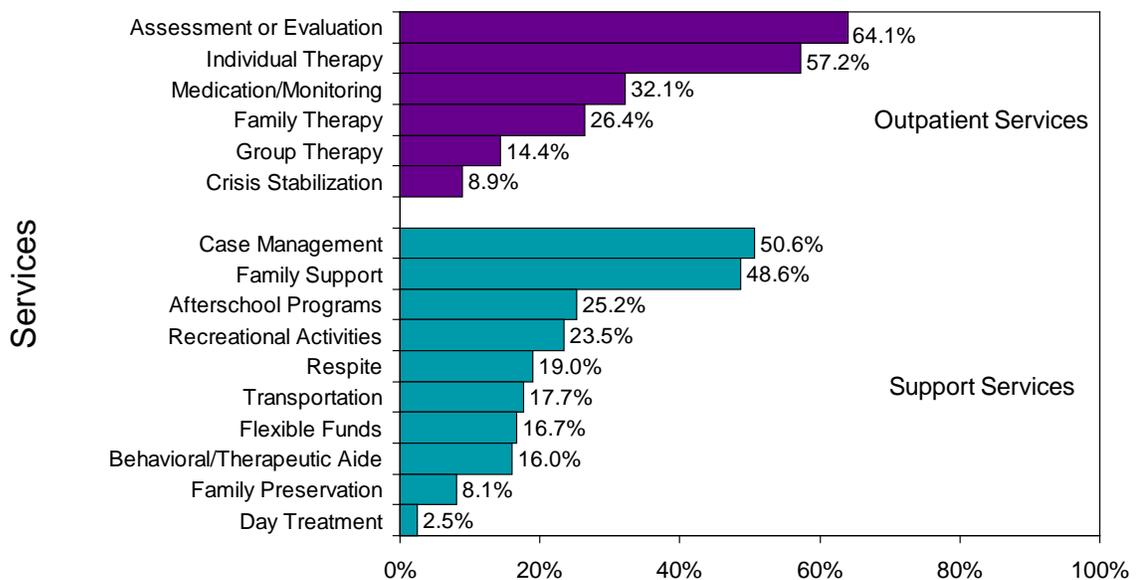
<sup>e</sup>  $\chi^2 = 8.5, df = 3, p < .05$ .  
<sup>f</sup>  $\chi^2 = 20.8, df = 3, p < .001$ .  
<sup>g</sup>  $\chi^2 = 14.1, df = 3, p < .005$ .  
<sup>h</sup>  $\chi^2 = 36.8, df = 3, p < .001$ .

<sup>i</sup>  $\chi^2 = 8.5, df = 3, p < .05$ .  
<sup>j</sup>  $\chi^2 = 12.6, df = 3, p < .05$ .  
<sup>k</sup>  $\chi^2 = 10.4, df = 3, p < .05$ .

### Younger Children (Aged 5 and Under) Received Fewer System of Care Services than Older Children

Greater attention has been placed on the mental health needs of young children from birth to 6 years in recent years (Cavanaugh, Lippitt, & Moyo, 2002). In systems of care funded in 1997–2000, the average number of services received by younger children and their families was 4.5 after 6 months in the program, fewer than those received overall by children served. The four services reported most frequently as received during the first 6 months in systems of care were assessment or evaluation (64.1 percent), individual therapy (57.2 percent), case management (50.6 percent), and family support (48.6 percent). Respite care, which is a service designed to provide family support, was utilized by 19 percent of families of young children who received services.

Figure 4. Services<sup>a</sup> Received by Children Aged 0–5 during the First 6 Months in Systems of Care



<sup>a</sup>Afterschool Programs sample  $n = 111$  (this service was added later to the list of services assessed; therefore, the sample size is smaller). Sample size for other services varied from 234 to 243. Child and family service use was measured by the MSSC (Multi-Sector Service Contacts). Restrictive services utilization is not reported due to very low numbers of young children receiving these services.

### **Fewer Rural Children Received Services than Urban Children**

In systems of care funded in 1997–2000, a lower percentage of children in rural systems of care received services than their urban counterparts. Table 8 lists services for which there was a significant difference between the number of urban children and rural children who received that service. Services were received more often by urban children than rural children, with the exception of a behavioral therapeutic aide, transition services, afterschool care, and therapeutic foster care.

Upon entry into system of care services, rural children tended to have less functional impairment than urban children; accordingly, it may be appropriate that they received fewer types of services. Approximately 25 percent of the nation’s population resides within rural communities (NFC, 2003). Within these communities, disparities in mental health care can be attributed largely to inadequate access to services, an inability to recruit and retain skilled staff, lack of adequate health care coverage, and reluctance to seek mental health care as a result of greater social stigma related to having a mental illness.

**Table 8. Percentage of Children Using Services, by Geography, at 6 Months after Entry into Services<sup>a</sup>**

Services	Urban (%)	Rural (%)	Significance
Crisis Stabilization	22.8 (n = 1,852)	18.9 (n = 1,661)	$\chi^2 = 7.96, df = 1, p < .05$
Family Therapy	42.0 (n = 1,851)	34.0 (n = 1,672)	$\chi^2 = 23.5, df = 1, p < .01$
Day Treatment	16.0 (n = 1,850)	10.2 (n = 1,672)	$\chi^2 = 25.4, df = 1, p < .01$
<b>Behavioral Therapeutic Aide</b>	18.4 (n = 1,845)	21.7 (n = 1,675)	$\chi^2 = 6.19, df = 1, p < .05$
<b>Transition</b>	2.2 (n = 1,852)	3.5 (n = 1,638)	$\chi^2 = 5.1, df = 1, p < .05$
Recreational Activities	38.5 (n = 1,850)	34.9 (n = 1,673)	$\chi^2 = 4.8, df = 1, p < .05$
<b>Afterschool Program</b>	13.5 (n = 1,701)	16.1 (n = 1,381)	$\chi^2 = 4.0, df = 1, p < .05$
Transportation	28.8 (n = 1,851)	20.6 (n = 1,660)	$\chi^2 = 31.4, df = 1, p < .01$
Flexible Funds	28.1 (n = 1,837)	21.6 (n = 1,634)	$\chi^2 = 19.4, df = 1, p < .01$
Inpatient Hospitalization	22.8 (n = 1,847)	18.9 (n = 1,675)	$\chi^2 = 6.6, df = 1, p < .01$
Residential Treatment Center	10.6 (n = 1,853)	7.7 (n = 1,673)	$\chi^2 = 9.3, df = 1, p < .05$
<b>Therapeutic Foster Care</b>	3.9 (n = 18,54)	5.8 (n = 1,670)	$\chi^2 = 6.7, df = 1, p = .01$

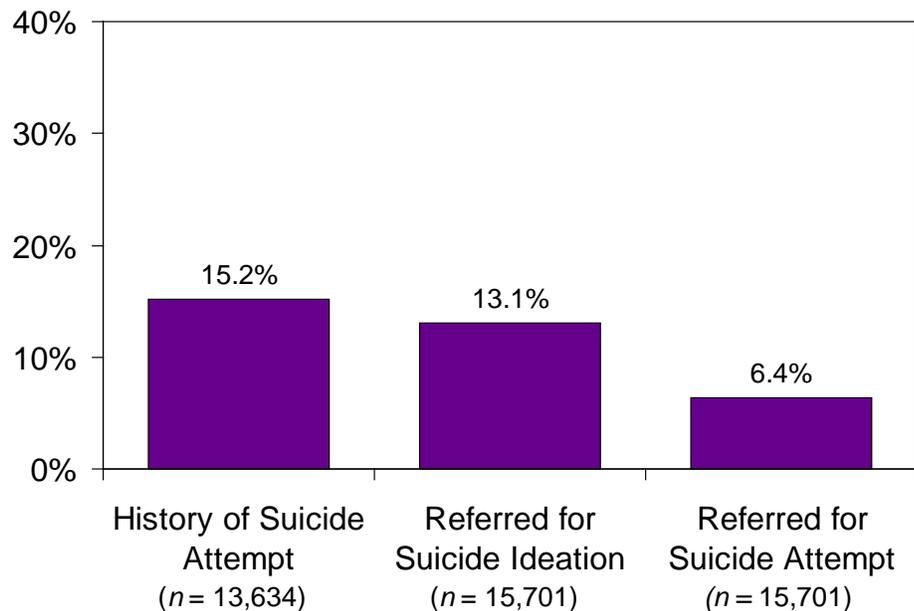
<sup>a</sup> **Bolded** services were used more often in rural communities than urban communities.

### Over 1 in 8 Children Participating in System of Care Communities Have a Suicide-Related History

In systems of care funded in 1997–2000, 15 percent of 13,634 caregivers with children and youth from the descriptive and outcomes study sample reported their children had a history of suicide attempt. The percentage of caregivers who reported a history of suicide attempt for their child or youth ranged from a low of 2 percent in one community to a high of 31 percent in another.

Thirteen percent of 15,701 children and youth from the descriptive and outcomes study sample were referred into care as a result of suicide ideation, and 6.4 percent were referred for attempted suicide. Suicide ideation as a reason for referral was reported by system of care communities as ranging from a low of 1 percent in one community to a high of 44 percent in another.

Figure 5. Prevalence of Suicide in System of Care Communities

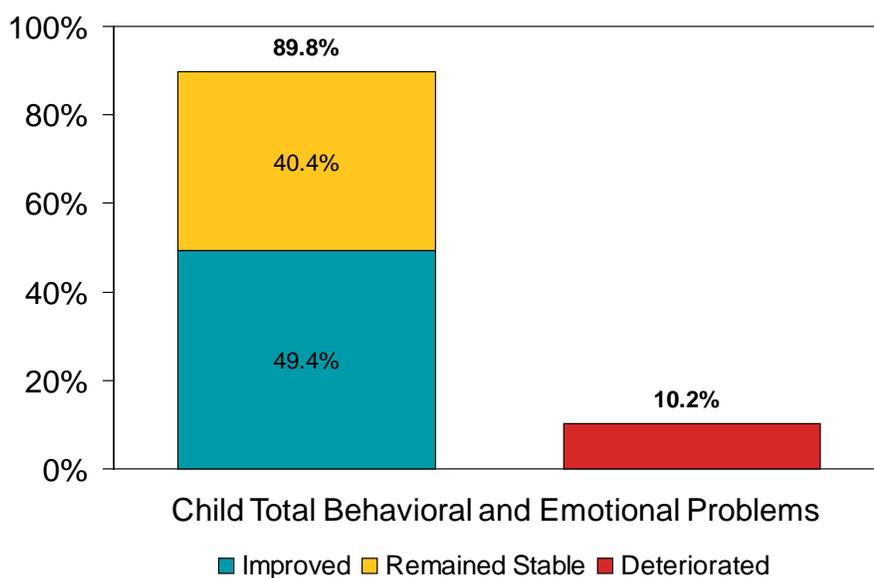


## CHILD AND FAMILY OUTCOMES

### *Behavioral and Emotional Problems Were Reduced over Time*

Children served in systems of care first funded in 1997–2000 showed a reduction in behavioral and emotional problems. Nearly half showed improvements and 40 percent remained stable from intake to 18 months, as measured by the Child Behavior Checklist (CBCL).<sup>18,19</sup>

**Figure 6. Reliable Change Index of Child Total Behavioral and Emotional Problems from Intake to 18 Months**



Number of children = 2,036.

The changes in behavioral and emotional problems of children and youth who remained stable did not reach levels of clinical significance. Although stabilization of clinical status does not equal improvement; it may be considered a positive outcome. These children and youth did not worsen clinically while in systems of care. By showing the percentage of children who remained stable together with those who improved, the larger percentage of children stabilized in their treatment can be considered. The findings indicate that nearly 90 percent of children showed significant improvements or remained stable in their total problem behaviors after 18 months in services.

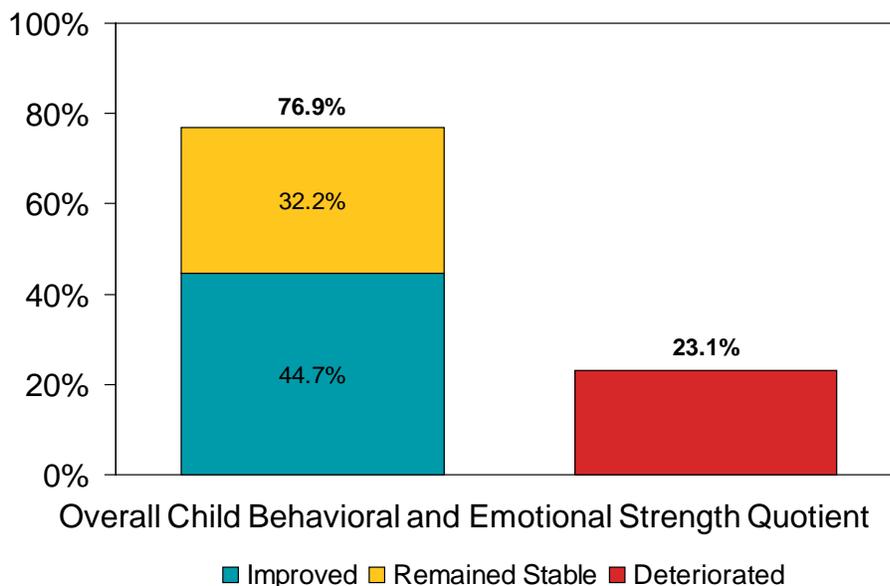
<sup>18</sup> The Child Behavior Checklist (CBCL) is a caregiver report to measure competencies and behavioral and emotional problems among children aged 4 through 18 years. The eight narrow band syndrome scales have a T-score range from 50 to 100, with scores under 67 indicating below the clinical range (i.e., fewer problems). The CBCL has been widely used in children's mental health services research and for clinical purposes.

<sup>19</sup> The reliable change index (RCI) compares a child's scores at two different points in time, adjusting for the reliability of the measure, and indicates whether a change in scores shows clinically significant improvement, stability, or deterioration. Improvement and deterioration are defined as a difference in outcome scores adjusted for measurement error of the outcome, which exceeds the 95 percent confidence bounds around a change score of 0. For more information on the reliable change index, please refer to Appendix E.

### Children's Behavioral and Emotional Strengths Improved over Time

Over three-fourths of children served in systems of care funded in 1997–2000 showed an increase or remained stable in behavioral and emotional strengths from intake to 18 months, as measured by the Behavioral and Emotional Rating Scale (BERS).<sup>20,21</sup>

Figure 7. Reliable Change Index of Overall Child Behavioral and Emotional Strengths Quotient from Intake to 18 Months



Number of children = 2,199.

Children's strengths are measured across several domains, including interpersonal strength, family involvement, intrapersonal strength, school functioning, and affective strengths.

Among children and youth whose behavioral and emotional strengths remained stable, changes in reported scores did not reach levels of clinical significance. Although stabilization does not equal improvement; it may be considered a positive outcome. These children and youth did not decline in their strengths after entering systems of care. By showing the percentage of children who remained stable together with those who improved, the larger percentage of children who stabilize or improve can be considered.

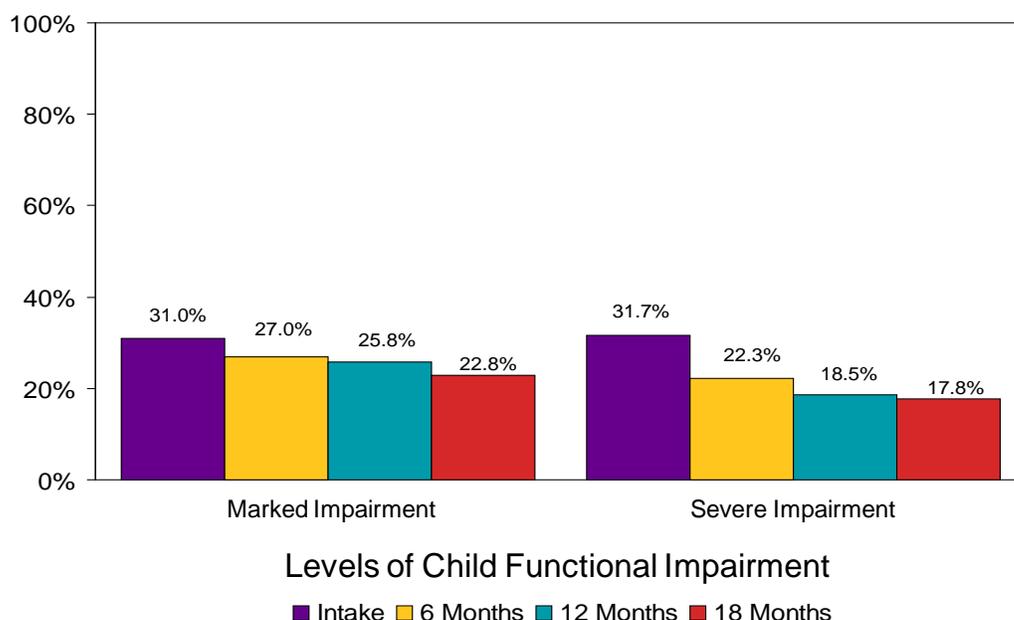
<sup>20</sup> The Behavioral and Emotional Rating Scale (BERS) is comprised of five domains of behavioral and emotional strengths. The BERS focuses on strengths and resiliency, identifying emotional and behavioral strengths of children and adolescents aged 5 to 18 in key areas related to school, family, relationships, and personal competence. The overall strength quotient has a range from 34 to 164, with scores below 90 indicating below average strength.

<sup>21</sup> Significance was determined by RCI. For more information on the reliable change index, please refer to Appendix E.

### Children's Clinical Functioning Improved over Time

The percentage of children with marked and severe functional impairment was reduced by 26.5 percent and 43.8 percent from intake to 18 months, respectively, indicating that children improved in functioning across time, as measured by the Child and Adolescent Functional Assessment Scale (CAFAS).<sup>22</sup>

Figure 8. Level of Child Functional Impairment at Intake, 6 Months, 12 Months, and 18 Months



Number of children = 1,594.

Functional impairment scores for children aged 5 and younger decreased by 12.2 points on average from service entry to 6 months in services, indicating significant improvement in functioning.<sup>23</sup> Although the change was not statistically significant, young children's total problem behaviors also decreased from intake to 6 months.

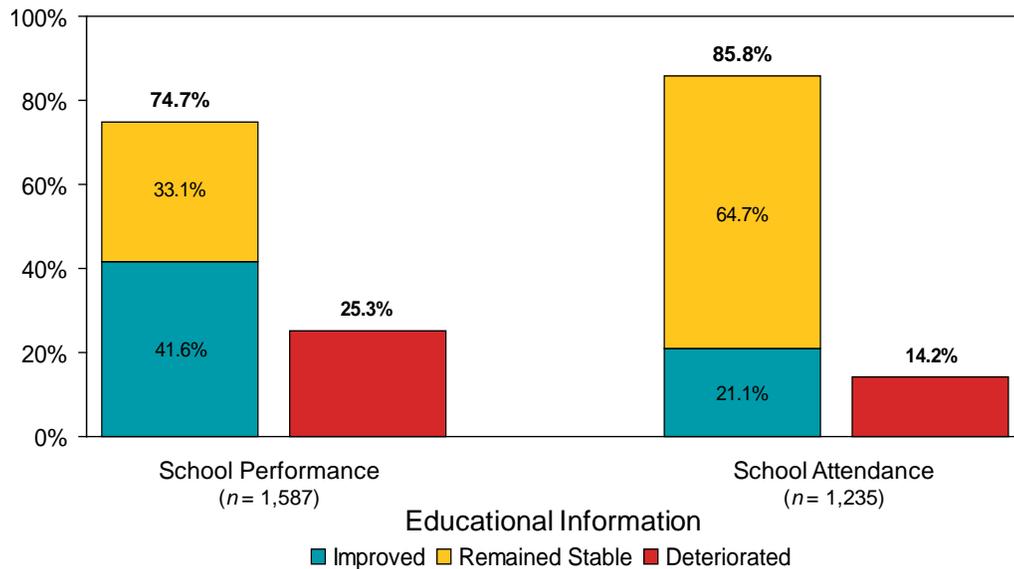
<sup>22</sup> The Child and Adolescent Functional Assessment Scale (CAFAS) is a widely used measure of child functioning. It assesses the degree to which a youth's mental health or substance abuse disorder is disruptive to his or her functioning in everyday life in each of eight psychosocial domains: the community, the school, the home, substance use, moods and emotions, self-harming behavior, behavior towards others, and thinking. The CAFAS is designed to assess the effects of the child's challenges and behaviors on his or her ability to function successfully in various life domains. An indication of "marked" to "severe" impairment designates major or persistent disruption to severe disruption in functioning. Based on the eight subscale scores on the rating form, a total CAFAS score can be generated by taking the sum of the eight scores, resulting in a total score with a range between 0 and 240. Marked to severe impairment indicates a score of 100 to 240.

<sup>23</sup>  $F = 7.08, n = 73, p < .01$ . These data were obtained with PECFAS (the young child version of the CAFAS used in one site serving young children only).

### Children Improved in School Performance and School Attendance over Time

As seen in Figure 9, nearly three-fourths of children either improved or remained stable in school performance at 18 months after enrollment in systems of care. During the same time period, about 86 percent of children either improved or remained stable in school attendance.

Figure 9. Change in School Performance and Attendance from Intake to 18 Months

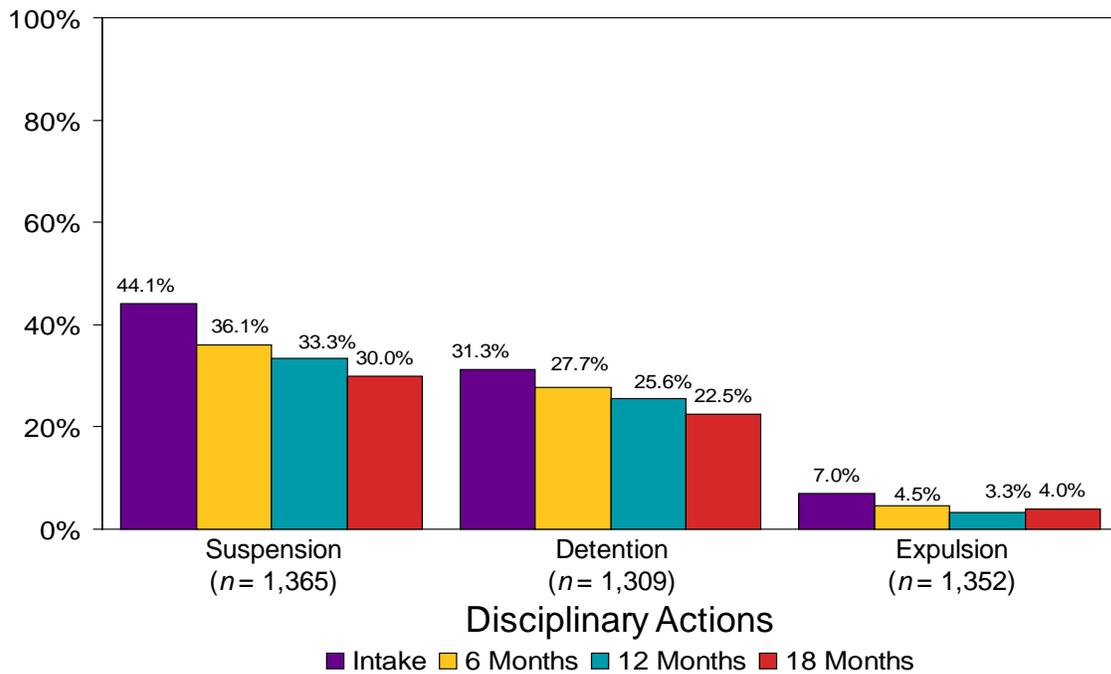


Change in school performance and attendance is defined as the following: (a) improved: children receiving a higher grade point average or attending school more frequently at the second data collection point than at the first data collection point, (b) remained stable: children receiving the same grade point average or attending school at the same frequency at both data collection points, (c) needs improvement: children receiving a lower grade point average or attending school less frequently at the second data collection point than at the first. Nearly 70 percent of children and youth attended school regularly at entry into services, 76 percent attended school regularly after 6 months, while 77 percent attended regularly after 18 months. Increasingly fewer children attended school infrequently from intake to 36 months (see Appendix C, Table C-3, Part 1).

### *The Percentage of Children Who Received School Disciplinary Actions Decreased over Time*

Figure 10 reports the percentage of children who were suspended, sent to detention, or expelled from school from intake to 18 months. The percentage of children who were suspended or sent to detention decreased from 44.1 percent to 30 percent and from 31.1 percent to 22.5 percent respectively. Nearly one third fewer children experienced these disciplinary actions after 18 months. Although a slight rebound in expulsions was evident at 18 months, the percentage of children who were expelled from school decreased over time and show an overall reduction to one-half fewer children expelled.

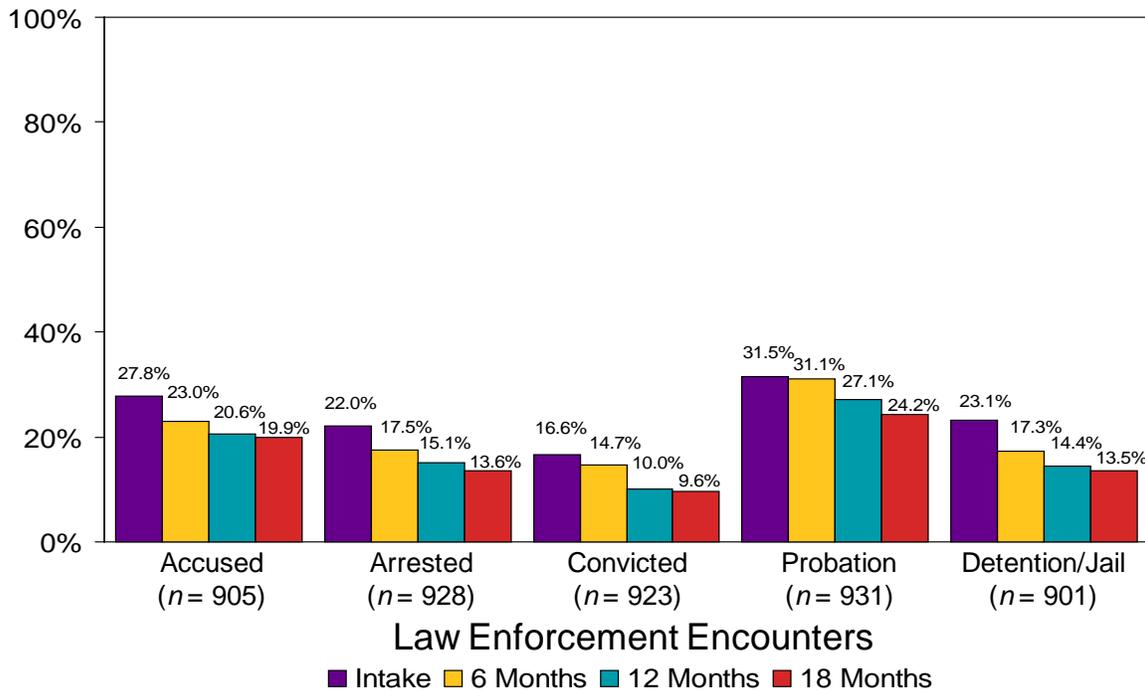
**Figure 10. Suspensions, Detentions, and Expulsions at Intake, 6 Months, 12 Months, and 18 Months**



### *The Percentage of Children with Law Enforcement Contacts Decreased over Time*

Figure 11 reports the percentage of children in systems of care who have been accused of committing a crime by police, arrested, convicted of a crime, or sentenced to probation and/or a detention center or jail up to 18 months after intake.

**Figure 11. Encounters with Law Enforcement at Intake, 6 Months, 12 Months, and 18 Months**

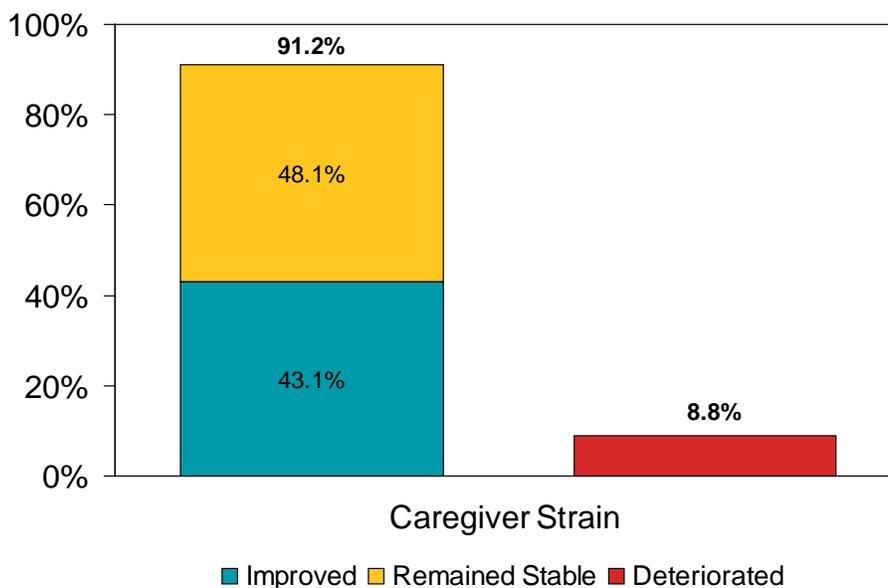


As illustrated, being accused of a crime, being arrested, being convicted of a crime and being sentenced to probation were reduced by about 8 percent after receiving services for 18 months. Being sent to detention or jail was reduced by almost 10 percent during the same time period.

### Caregiver Strain Decreased over Time

Over two-fifths of caregivers of children served by systems of care first funded in 1997–2000 reported a significant reduction from intake to 18 months in the strain associated with caring for a child with serious emotional disturbance.<sup>24</sup> Nearly half of caregivers reported stable levels of strain during the same time period.<sup>25</sup>

Figure 12. Reliable Change Index of Caregiver Strain from Intake to 18 Months



Number of caregivers = 2,172.

Stabilizing caregivers and families so that they are able to keep children who are experiencing serious emotional disturbances in their homes and communities is an important goal of systems of care. The findings indicate a large proportion of caregivers who reported stability or improvements in the level of strain experienced while caring for a child with a serious emotional disturbance. Assessing the impact of caring for a child with mental health challenges on the caregiver and family contributes to understanding the resource (i.e., respite services) needs of the whole family.

<sup>24</sup> Caregiver strain was measured with the Caregiver Strain Questionnaire (CGSQ; Brannan, Heflinger, & Bickman, 1998), which assesses the extent to which caregivers are affected by the special demands associated with caring for a child with emotional and behavioral problems and the impact that participating in system of care services has on the strain caregivers and families may experience. For example, the CGSQ can be used to determine whether strain lessens over time as better services and supports are provided by the system of care.

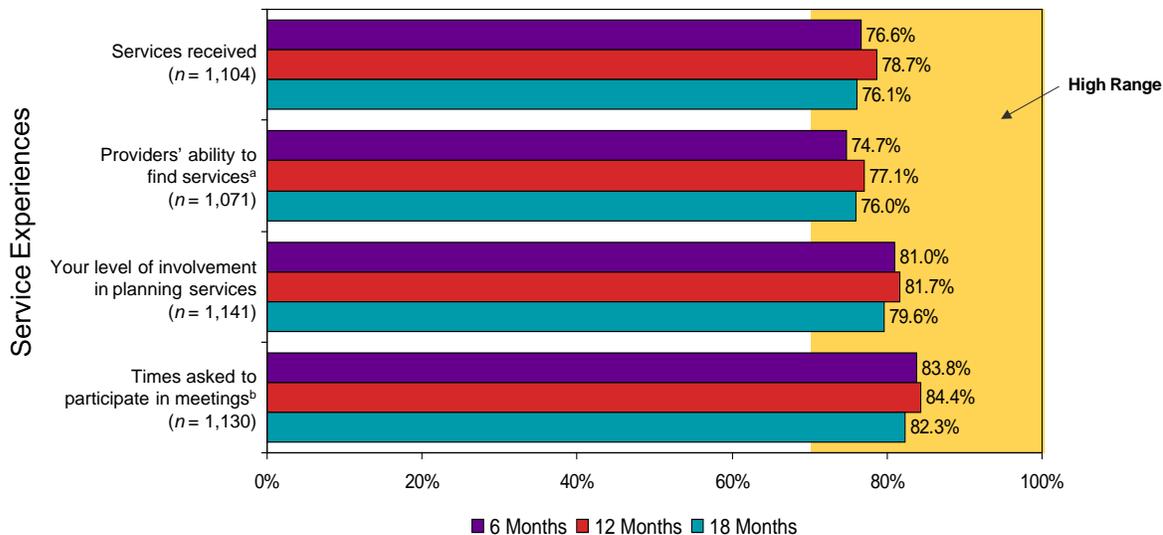
<sup>25</sup> Significance was determined by RCI. For more information on the reliable change index, please refer to Appendix E.

### **Caregivers Rated Their Satisfaction with System of Care Services at a High Level**

The large majority of caregivers (75 percent to 84 percent) rated their satisfaction as of FY 2004 with system of care services in communities funded in 1997–2000 as high across a variety of dimensions. Satisfaction across time increased from 6 months to 12 months, with a slight drop at 18 months.

**Figure 13. Caregiver Satisfaction at 6 Months, 12 Months, and 18 Months**

Satisfied or very satisfied with:



<sup>a</sup> Specifically those services that acknowledge the positive aspects or strengths of your family's culture and traditions.

<sup>b</sup> These are meetings where services for child (or caregiver) were discussed.

- Over 76 percent of caregivers were satisfied with services.
- Over 75 percent of caregivers were satisfied with their provider's ability to find services that acknowledge the family's culture and traditions, including the respect shown by providers toward the family's beliefs about mental health.
- Over 80 percent of caregivers were satisfied with their level of involvement in planning services.
- Over 83 percent of caregivers were satisfied with the number of times they were asked to participate in meetings.

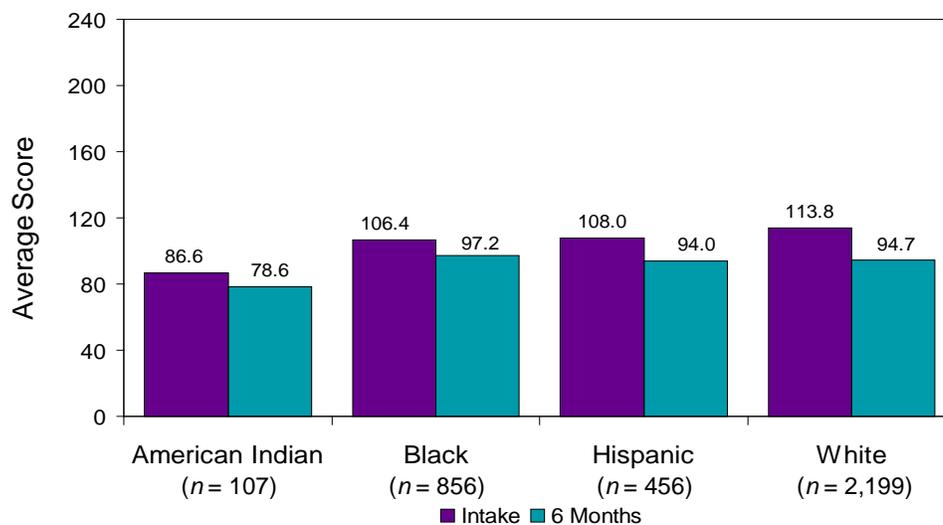
## CLINICAL AND PROGRAM OUTCOMES

### *Children of All Racial and Ethnic Backgrounds Significantly Improved Their Functioning from Intake to 6 Months*

Children from varying racial and ethnic groups receiving system of care services have been found to show differences in clinical outcomes over time (Bickman, Lambert, Andrade, & Penalzoa, 2000; CMHS, 2003b; Gilford, Stephens, & Foster, 2003). CAFAS scores were used to assess functional impairment from intake to 6 months in services.<sup>26</sup>

Change in functional impairment over time differed significantly as a function of race/ethnicity.<sup>27</sup> White children exhibited greater improvements in functional impairment than children in all other racial/ethnic groups. Yet, across all racial/ethnic groups, children showed significant improvement in functioning from intake to 6 months in services.<sup>28</sup> Regardless of timeframe, significant differences in functional impairment were observed among the four racial/ethnic groups.<sup>29</sup> American Indian children had the lowest levels of functional impairment compared to the other three racial and ethnic groups.<sup>30</sup>

**Figure 14. Improvement in CAFAS Total Score by Race/Ethnic Groups**



Note: Lower CAFAS scores reflect improved functioning.

The differences found may be due to disparities in service access. With the growing population of racial and ethnic minority groups throughout the nation, much needs to be done to reduce mental health service disparities across racial/ethnic groups. Steps should be taken to increase the types of services available to minority children and increase cultural competence training.

<sup>26</sup> Child and Adolescent Functional Assessment Scale. For a description of this measure, see page 32.

<sup>27</sup>  $F = 11.7$ ,  $df = 3/3,614$ ,  $p < .001$  for the Group X Time interaction.

<sup>28</sup>  $F = 96.3$ ,  $df = 1/3,614$ ,  $p < .001$  for the Time main effect.

<sup>29</sup>  $F = 9.6$ ,  $df = 3/3,614$ ,  $p < .001$  for the Group main effect.

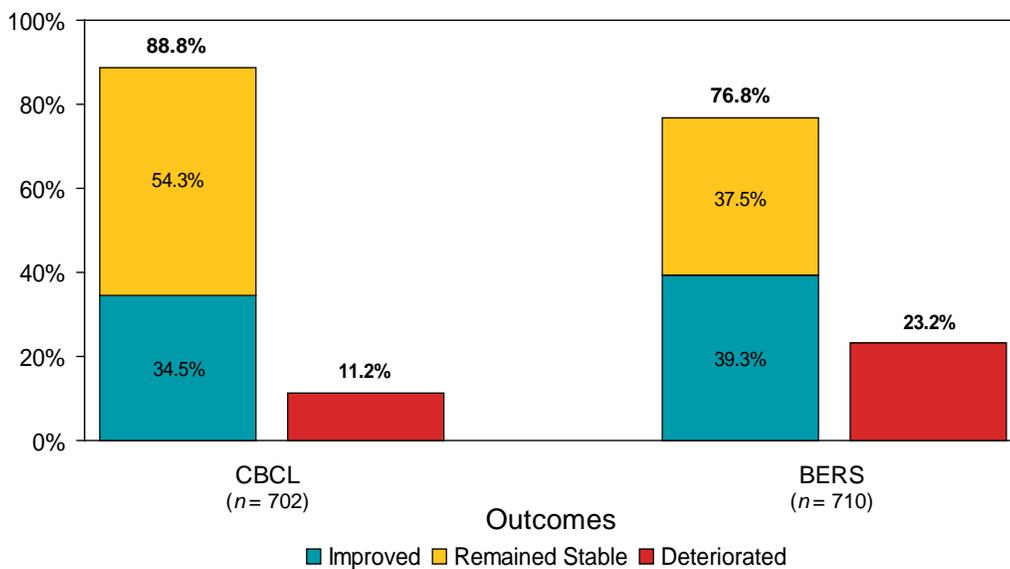
<sup>30</sup>  $p < .001$  for all multiple comparisons of racial/ethnic group difference.

### **Children Referred from Schools Improved or Remained Stable from Intake to 6 Months on Clinical Indicators and School Outcomes<sup>31</sup>**

Significant improvements in emotional and behavior problems (CBCL)<sup>32</sup> and child strengths (BERS)<sup>33</sup> were reported for 34.5 percent and 39.3 percent of children referred from schools respectively (see Figure 15).<sup>34</sup> After only 6 months in services in systems of care funded in 1997–2000, school performance remained the same or improved for 75 percent of children who were referred by schools. For slightly over 87 percent of children, school attendance improved or remained stable (see Figure 16).<sup>35</sup>

There were some differences between school-referred children and those referred by other sources. For example, children referred by schools were younger ( $M = 11.6$  versus  $M = 12.4$ )<sup>36</sup> and were significantly more likely to have an Individualized Education Plan (IEP) (60.6 percent versus 55.2 percent)<sup>37</sup> than children referred through other sources. IEPs for students served in systems of care indicate coordination across the education and mental health service sectors.

**Figure 15. Reliable Change in Clinical Indicators of Children Referred from Schools from Intake to 6 Months**



<sup>31</sup> A subsample of school-referred children was used for this analysis. A proportional distribution of all referral sources can be found in Table C-2 of Appendix C.

<sup>32</sup> Child Behavior Checklist. For a description of this measure, see page 30.

<sup>33</sup> Behavioral and Emotional Rating Scale. For a description of this measure, see page 31.

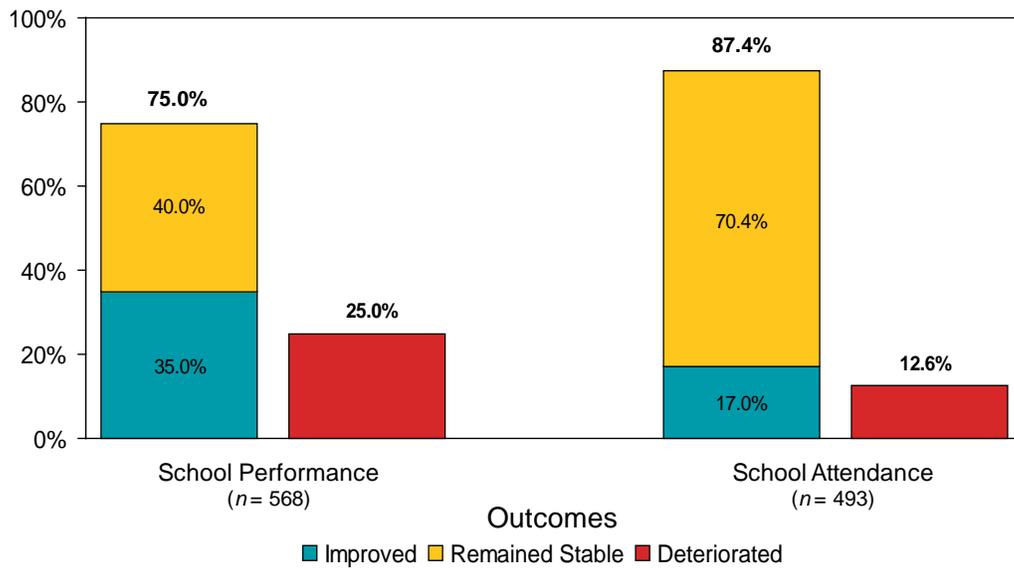
<sup>34</sup> Significance was determined by RCI. For more information on the reliable change index, please refer to Appendix E.

<sup>35</sup> A description of change in school performance and attendance can be found on page 33.

<sup>36</sup>  $F = 84.33, n = 13,436, p < 0.01.$

<sup>37</sup>  $\chi^2 = 10.63, n = 5,936, p < 0.01.$

**Figure 16. Change in School Performance and Attendance of Children Referred from Schools from Intake to 6 Months**

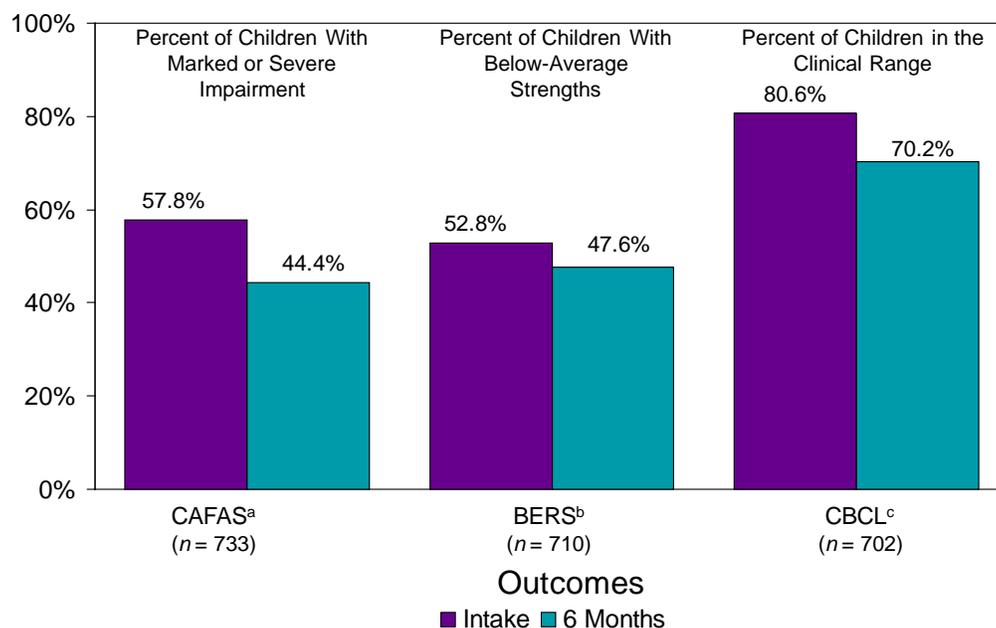


### **Number of Children Referred from Schools with Severe Problems Decreased from Intake to 6 Months after Entry into Systems of Care<sup>38</sup>**

After 6 months in services, the number of children whose CAFAS score indicated marked to severe functional impairment decreased by 13.4 percent.<sup>39</sup> In addition, the number of children who displayed below average strengths significantly decreased by 5.2 percent (as measured by the BERS<sup>40</sup>).

The number of children with a CBCL Total Problems score in the clinical range (i.e., more problems) significantly decreased by 10.4 percent after the first 6 months in services.<sup>41</sup> These changes did not differ from those of children referred from other sources.

**Figure 17. Percentage of Children Referred from Schools with More Severe Problems at Intake and 6 Months as Measured by the CAFAS, BERS, and CBCL**



<sup>a</sup> z = -5.10, p < .01.

<sup>b</sup> z = -1.96, p < .05.

<sup>c</sup> z = -4.50, p < .01.

<sup>38</sup> A subsample of school-referred children was used for this analysis. A proportional distribution of all referral sources can be found in Table C-2 of Appendix C.

<sup>39</sup> Child and Adolescent Functional Assessment Scale. For a description of this measure, see page 32.

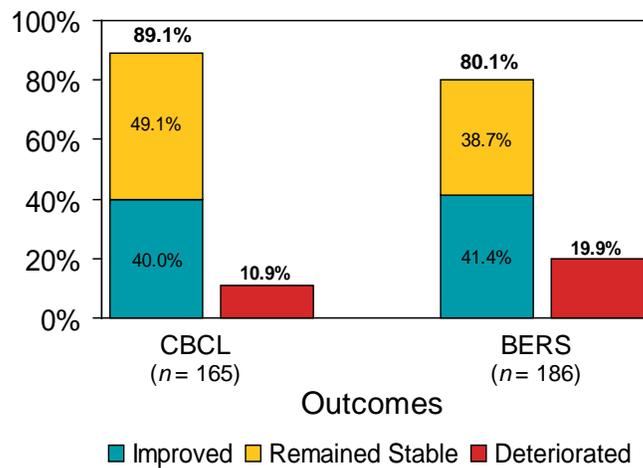
<sup>40</sup> Behavioral and Emotional Rating Scale. For a description of this measure, see page 31.

<sup>41</sup> Child Behavior Checklist. For a description of this measure, see page 30.

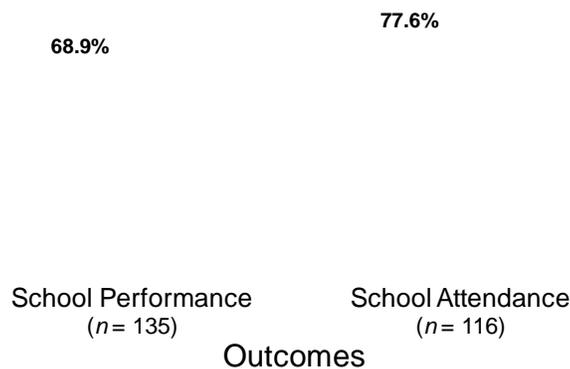
### **Children with Co-Occurring Substance Use Disorder Improved or Remained Stable on Clinical Indicators and School Outcomes**

About 89 percent of children in systems of care with co-occurring substance use disorders either remained stable or exhibited a significant reduction in behavioral and emotional problems (as measured by the CBCL<sup>42</sup>). Significant improvements in children’s strengths (as measured by the BERS<sup>43</sup>) were shown by 41.4 percent of children with co-occurring substance use disorders; children’s strengths remained stable for an additional 38.7 percent of children.<sup>44</sup> Similarly, almost 69 percent of children with co-occurring substance use disorders either remained stable or improved their school performance and 29.3 percent exhibited significant improvement in school attendance.<sup>45</sup>

**Figure 18. Reliable Change in Clinical Indicators of Children with Substance Use Disorders from Intake to 6 Months**



**Figure 19. Change in School Performance and Attendance of Children with Substance Use Disorders from Intake to 6 Months**



<sup>42</sup> Child Behavior Checklist. For a description of this measure, see page 30.

<sup>43</sup> Behavioral and Emotional Rating Scale. For a description of this measure, see page 31.

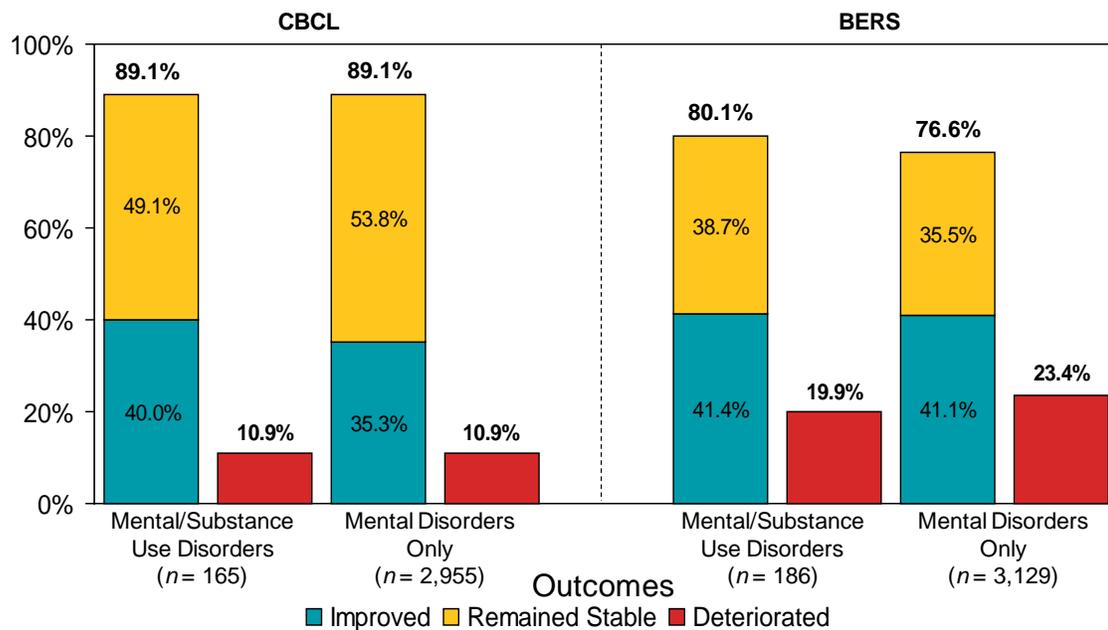
<sup>44</sup> Significance was determined by RCI. For more information on the reliable change index, please refer to Appendix E.

<sup>45</sup> A description of change in school performance and attendance can be found on page 33.

**Both Children with Co-Occurring Mental and Substance Use Disorders and Those with Mental Disorders Only Improved or Remained Stable on Clinical Indicators from Intake to 6 Months of Services**

Approximately 89 percent of children in systems of care with co-occurring mental and substance use disorders and those with mental disorders only either remained stable or exhibited a significant reduction in behavioral and emotional problems (as measured by the CBCL<sup>46</sup>). Significant improvements in children’s strengths (as measured by the BERS<sup>47</sup>) were evident in about 41 percent of both children with co-occurring substance use disorders and those with mental disorders only; children’s strengths remained stable for an additional 38.7 percent of children with co-occurring substance use and 35.5 percent of those with mental disorders only.<sup>48</sup>

**Figure 20. Reliable Change in Clinical Indicators of Children with Co-Occurring Mental and Substance Use Disorders and Those with Mental Disorders Only from Intake to 6 Months**



<sup>46</sup> Child Behavior Checklist. For a description of this measure, see page 30.

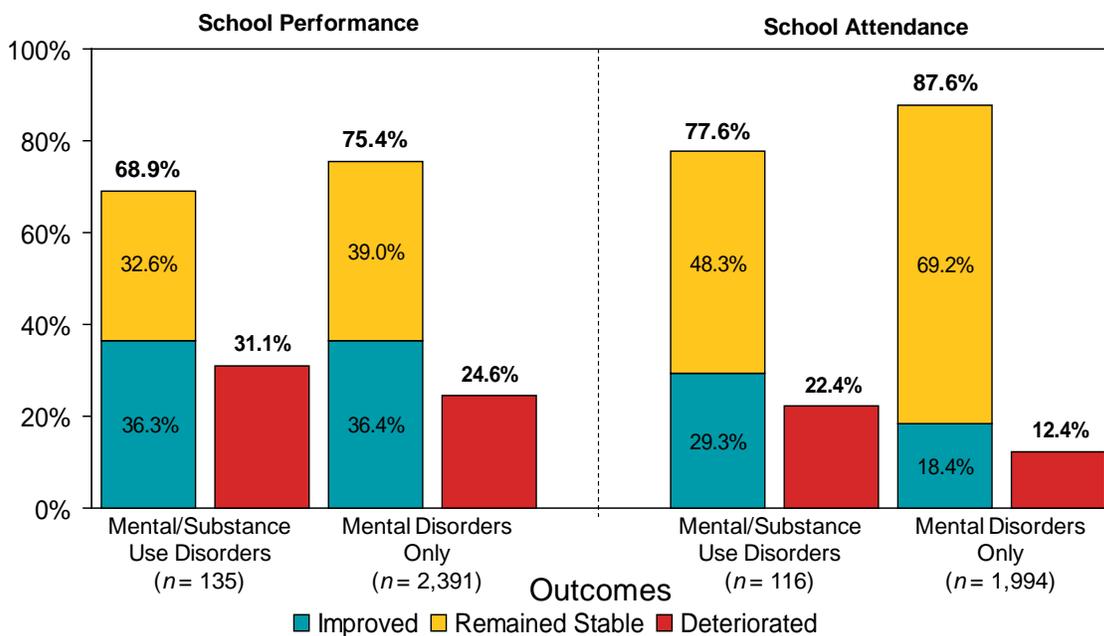
<sup>47</sup> Behavioral and Emotional Rating Scale. For a description of this measure, see page 31.

<sup>48</sup> Significance was determined by RCI. For more information on the reliable change index, please refer to Appendix E.

**Both Children with Co-Occurring Mental and Substance Use Disorders and Those with Mental Disorders Only Improved or Remained Stable on School Outcomes from Intake to 6 Months of Services**

Both children with co-occurring substance use disorders and children with mental disorders only either improved or remained stable in their school performance (69 percent and 75 percent respectively). In addition, significant differences were found in change over time among children with co-occurring substance use disorders and those with mental disorders only for school attendance, where 77 percent of children with co-occurring substance use disorders and 87 percent of children with mental disorders only and either improved or remained stable 6 months after receiving services.<sup>49,50</sup>

**Figure 21. Change in School Performance and Attendance of Children with Co-Occurring Mental and Substance Use Disorders and Those with Mental Disorders Only from Intake to 6 Months**



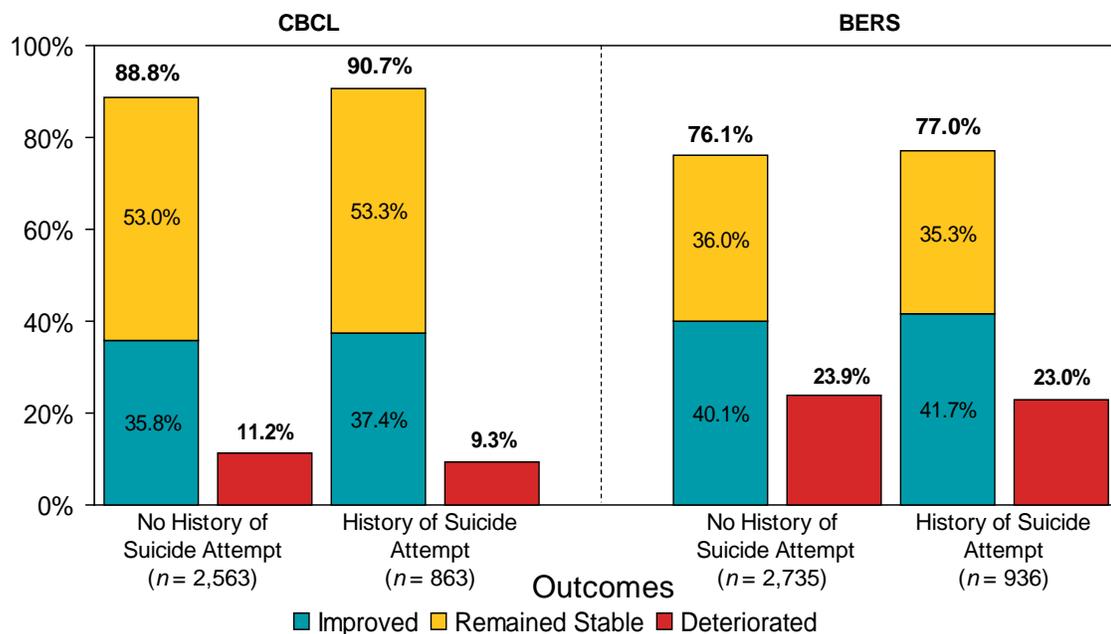
<sup>49</sup> Pearson chi-square = 22.44;  $p < .001$

<sup>50</sup> A description of change in school performance and attendance can be found on page 33. Significance was determined by RCI. For more information on the reliable change index, please refer to Appendix E

**Children with a History of Suicide Attempts or Suicide Ideation Reduced Their Emotional and Behavioral Problems at the Same Rate as Those without a History of Suicide Attempts or Suicide Ideation**

Among children with a history of suicide attempts or suicidal ideation, 37.4 percent showed clinically significant improvements in emotional and behavioral problems (as measured by CBCL<sup>51</sup> scores) after 6 months in services. Likewise, 35.8 percent of children with no known history of suicide attempts or ideation demonstrated significant improvement in emotional and behavioral problems. A similar pattern was observed for behavioral and emotional strengths (as measured by the BERS<sup>52</sup>), with clinically significant improvements in strengths being reported for 41.7 percent of children with a history of suicide attempts or suicidal ideation and 40.1 percent of children with no known history (see Figure 22).<sup>53</sup>

**Figure 22. Reliable Change in Clinical and Functional Indicators of Children with and without Suicide History**



Children with and without suicide attempt and ideation histories may have had similar results because all children with a suicide-related history were put into a single category. In addition, overall problem and strength scores were assessed, instead of focusing on specific subscales of these measures. As indicated in Figures 23 and 24, different rates of improvement are seen when specific subscales are explored.

<sup>51</sup> Child Behavior Checklist. For a description of this measure, see page 30.

<sup>52</sup> Behavioral and Emotional Rating Scale. For a description of this measure, see page 31.

<sup>53</sup> Significance was determined by RCI. For more information on the reliable change index, please refer to Appendix E.

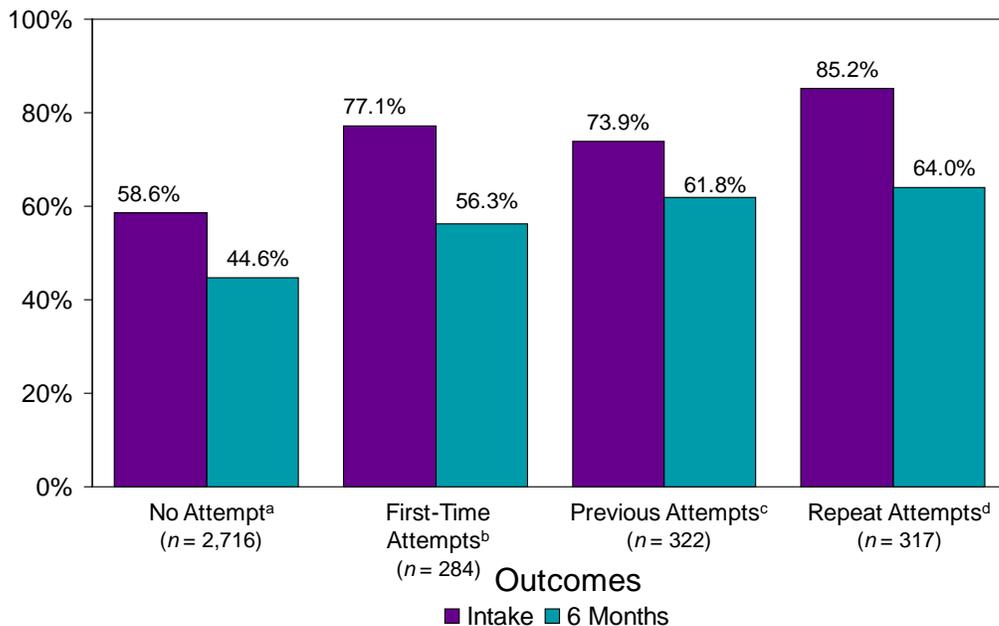
### **Children with Multiple Suicide Attempts Significantly Improved Their Functioning from Intake to 6 Months after Beginning Services**

The degree of functional impairment was measured (using the CAFAS<sup>54</sup>) for four groups of children: those with a history of

- no suicide attempts;
- first-time attempts;
- previous attempts, but suicide attempt or ideation was not the reason for the current referral; and
- multiple attempts and entered services following a suicide attempt or had suicidal ideation.

Assessments completed at intake and 6 months after beginning system of care services indicated significant differences in rates of change across the groups. Functional impairment was reduced for all four groups 6 months after beginning services; however, the largest improvement was experienced by children who repeatedly attempted suicide. Specifically, the proportion of these children with moderate to severe levels of impairment decreased from 85.2 percent to 64.0 percent at 6 months after services.

**Figure 23. Percentage of Children with Moderate to Severe Impairment as Measured by the CAFAS at Intake and 6 Months for Four Suicide Groups**



<sup>a</sup> z = -10.31, p < .01.

<sup>b</sup> z = -5.19, p < .01.

<sup>c</sup> z = -3.28, p < .01.

<sup>d</sup> z = -5.96, p < .01.

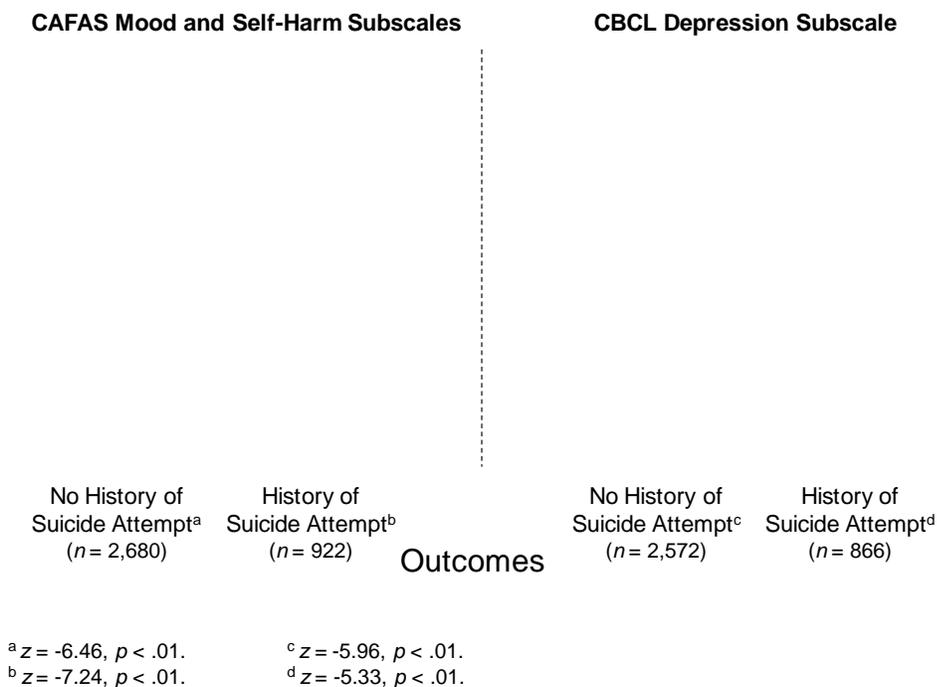
<sup>54</sup> Child and Adolescent Functional Assessment Scale. For a description of this measure, see page 32.

**Children with Severe Depression or Functional Impairment  
and a History of Suicide Attempts or Suicidal Ideation  
Improved from Intake to 6 Months after Services**

Among children with a reported history of suicide attempts or suicidal ideation, the number of children with marked to severe functional impairment (as determined by scores on the CAFAS Mood and Self-Harm subscales), decreased by 13.7 percent after the first 6 months in services. The corresponding decrease among children with no known reported history was 8.5 percent.<sup>55</sup> Among children with a reported history of suicide attempts, the number of children with severe depression (as measured by the CBCL depression subscale), decreased by 12.7 percent.<sup>56</sup> Accordingly, among children with no known reported history of suicide attempts, the number of children with severe depression decreased by 8.0 percent. These findings indicate that while children, regardless of suicide attempt history, experience improvement in internalizing outcomes (such as depressive symptoms), those with suicide attempt histories demonstrate more dramatic improvement.

For the CAFAS subscale, the difference in the rates of change (from intake to 6 months) between those with a history of suicide attempt and those without such a history was statistically significant,<sup>57</sup> indicating different rates of improvement for the two groups of children. In this case, children with a reported history of suicide attempts showed better rates of improvement than those without this history. However, no statistically significant differences were found between the two groups on measures of the CBCL subscale.

**Figure 24. Percentage of Children with and without Suicide History  
with More Severe Problems at Intake and 6 Months**



<sup>55</sup> Child and Adolescent Functional Assessment Scale. For a description of this measure, see page 32.

<sup>56</sup> Child Behavior Checklist. For a description of this measure, see page 30.

<sup>57</sup> z = -3.87, n = 3,602, p < 0.01.

### ***Participating Children Decreased Their Juvenile Justice Involvement during the First 18 Months in Services***

The Phase II comparison study<sup>58</sup> was designed to collect information about children and families served in two selected funded system of care communities funded in 1997 as compared to communities that did not receive grant funds. The two system of care communities in Alabama and Nebraska were matched with two non-funded comparison communities within the same States. Comparison communities were located within the same States to ensure they would be subject to the same State mental health structures and any Statewide mental health care changes that might be implemented during the study period. The comparison sites were matched to the extent possible on service delivery approach, geographic, demographic, and economic characteristics, rate of child enrollment, child referral patterns, and caregiver consent (including the community's willingness to participate in the evaluation study).

Among the 202 children served by the Alabama system of care, 66.8 percent had juvenile justice records prior to enrolling in the system of care. In the matched non-system of care community, 9.5 percent of 189 children participating in the evaluation had contact with the juvenile justice system prior to intake.

In the system of care community, children were most likely to be charged with status offenses (18.8 percent) such as truancy, running away, and uncontrollable/ungovernable behavior, followed by offenses that represent danger to persons (12.4 percent) and offenses involving damage to property (9.8 percent). In the comparison site, charges of theft were most likely to occur (22.2 percent), followed by damage to property (19.4 percent) and offenses involving danger to persons (18.1 percent).

The proportion of children charged with various crimes decreased significantly from 66.8 percent to 46.5 percent during the first 18 months in services in the system of care community.<sup>59</sup> Conversely, the rates of juvenile justice involvement during the first 18 months of evaluation among children served in the matched comparison community increased from 9.5 percent to 13.7 percent.

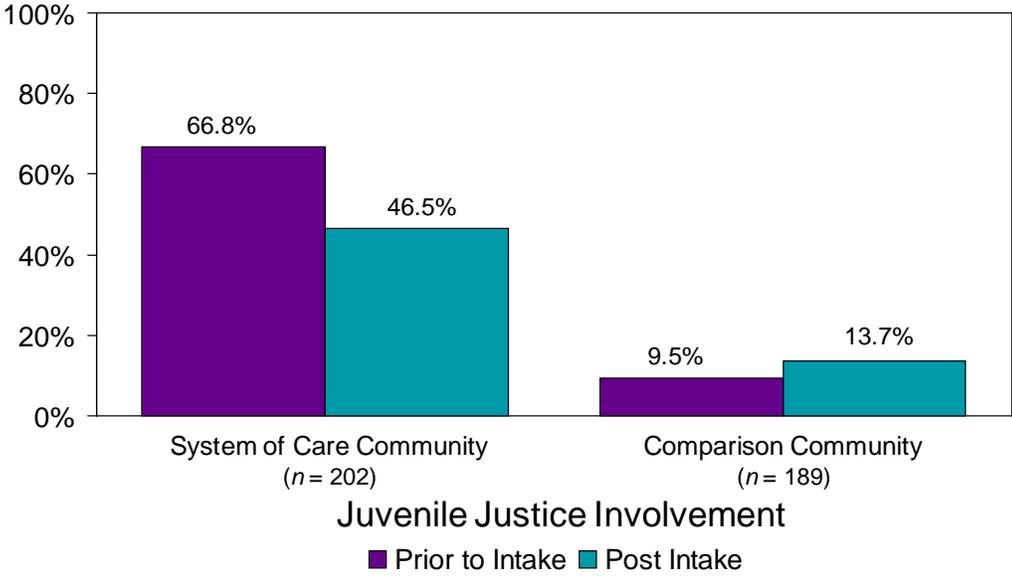
These findings must be considered within the context of the differing organizational structures of the two mental health service environments. The system of care program outstationed assessment staff in juvenile justice and child welfare facilities. The approach was unique within the State and, thus, finding a comparison community within the State that replicated the same collaborative agency relationships relative to their referral mechanisms was not possible. The reduction in subsequent juvenile justice contacts in the system of care is remarkable given the system's focus on children referred from juvenile justice.

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<sup>58</sup> More information on the Phase II comparison study can be found in Appendix B and Tables E-6, E-7, and E-8 in Appendix E.

<sup>59</sup>  $z = 4.1, p < 0.001$ .

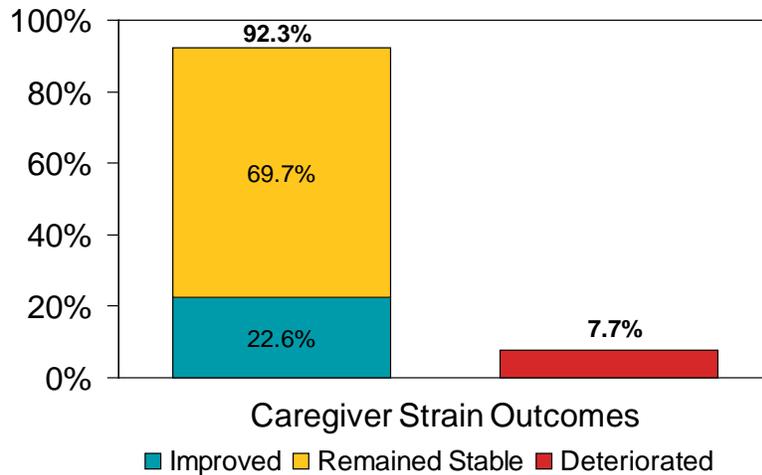
**Figure 25. Percentage of Children Involved with the Juvenile Justice System at Intake and 6 Months in a System of Care and a Matched Comparison Community**



## Over 90 Percent of Caregivers Reported Reduced or Stable Levels of Strain; Young Children Improved in School Attendance

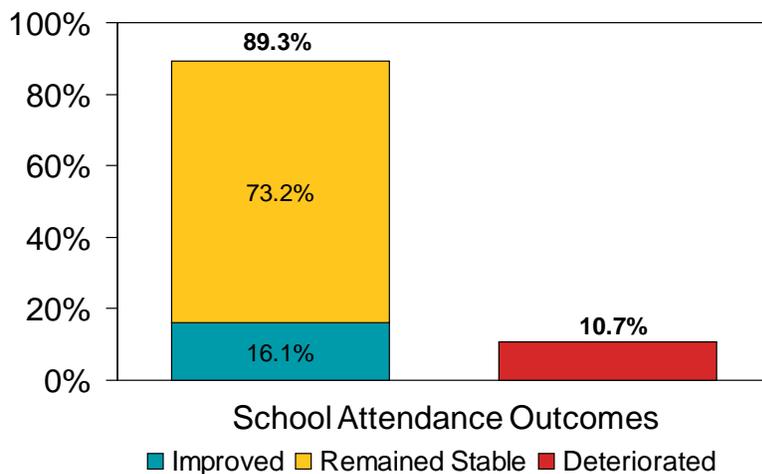
The strain for caregivers of children aged 0–5 was reduced significantly for 22.6 percent and remained stable for 69.7 percent of caregivers after 6 months in services.<sup>60,61</sup> School attendance remained stable for 73.2 percent of young children from intake to 6 months in services. Attendance improved for 16.1 percent of young children.<sup>62</sup>

**Figure 26. Reliable Change in Strain for Caregivers of Children Aged 0–5 from Intake to 6 Months after Entry**



Number of children = 221.

**Figure 27. Change in Outcomes of Children Aged 0–5 from Intake to 6 Months after Entry**



Number of children = 56.

<sup>60</sup> Caregiver strain was measured using the CGSQ. For a description of this measure, see page 36.

<sup>61</sup> Significance was determined by RCI. For more information on the reliable change index, please refer to Appendix E.

<sup>62</sup> A description of change in school attendance can be found on page 33.

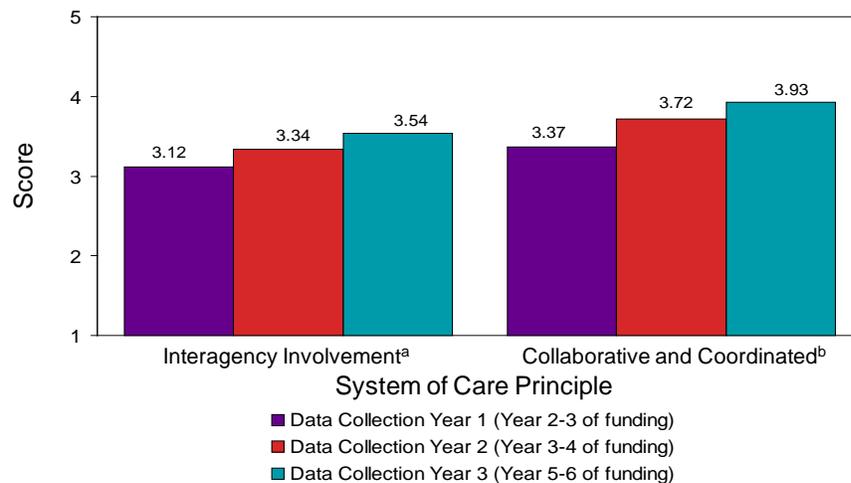
## INFRASTRUCTURE, SERVICE DELIVERY, AND PRACTICE OUTCOMES

### *Systems of Care Improve over Time in Interagency Involvement, Coordination, and Collaboration*

Two fundamental underlying principles that guide system of care development are that there should be interagency involvement in the system of care and that public child-serving agencies, public and private service providers, and community-based organizations should engage in cross-agency coordination and collaboration in both infrastructure and service delivery activities. The system of care assessment systematically collected data every 12–18 months throughout the grant funding cycle to measure the extent to which communities made progress in implementing these principles.<sup>63</sup> This analysis uses data that were collected across three waves of assessments of 14 communities funded in 1998 10 communities funded in 1999–2000 for which complete data were available at the time of this analysis.

The findings indicate a meaningful trend toward improvement over time on how systems of care implemented interagency and coordination and collaboration principles, as noted by the increasing ratings from waves 1 to 3. However, overall ratings in each wave of data collection indicate that system of care communities generally performed in the mid-range of the rating scale, indicating that more efforts were needed to achieve the highest level of interagency involvement and cross-agency coordination and collaboration.

**Figure 28. Mean System of Care Assessment Scores for Communities with Complete Data across Assessment Points 1, 2, and 3: Interagency involvement and Collaborative/Coordinated**



Number of communities = 24.

Note: Scores range from 1 to 5, with a score of 1 indicating no efforts were made to achieve the goal of implementing the principle and a score of 5 indicating that efforts made were effective and the goal was met with little or no need for improvement.

<sup>a</sup>  $F = 19.83$ ,  $df1 = 2$ ,  $df2 = 46$ ,  $p < .001$ .

<sup>b</sup>  $F = 28.41$ ,  $df1 = 2$ ,  $df2 = 46$ ,  $p < .001$ .

<sup>63</sup> For more information on the system of care assessment, see Appendix B for a description and Table E-9 in Appendix E for a summary of performance scores for all system of care principles.

## ***Systems of Care Demonstrate Achievements in Interagency Involvement, Coordination, and Collaboration***

System of care assessment qualitative data collected from all 45 system of care communities funded in 1997–2000 in their mid- to final years of funding in FY 2003 provide illustrations of the achievements made by system of care communities in interagency involvement, coordination, and collaboration in both infrastructure and service delivery activities as well as continuing challenges and barriers to goal achievement.

### **Achievements**

- All system of care communities had cross-agency governance or planning bodies that included representation from public child-serving agencies such as mental health, child welfare, juvenile justice, and education. Just over one-fourth also had representation from public health.
- All communities held regular and routine interagency meetings for program administration.
- All communities provided case management or care coordination services to all children and families participating in the program.
- All communities had routine interagency meetings for the purpose of individual child and family service planning and review of progress.

### **Barriers to Goal Achievement**

- Confidentiality requirements and limitations across agencies
- Cross-purpose agency mandates or duplication of efforts across agencies
- Incompatible recordkeeping and required forms
- Inflexible work hours due to union contracts or allowable reimbursement
- Large caseloads across all agencies
- Rigid bureaucratic rules and regulations
- Staff turnover
- Turf issues between agencies
- Varying levels of commitment by agencies and individuals involved

### **Ongoing Challenges**

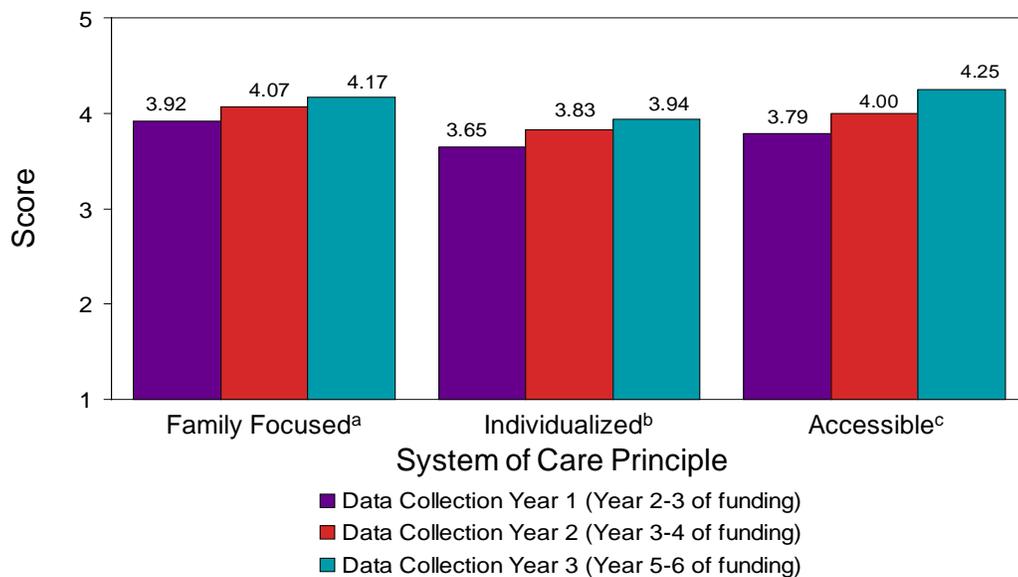
- Over 50 percent of communities reported sharing administrative processes across agencies; however, most of these agencies reported only cross-agency efforts to recruit, hire and train staff. Only about 10 percent reported efforts to develop or use a single referral/intake form, unified case plan, or central management information system to aid in reducing duplication and fragmentation of services.
- Only about one-third of communities combined funds across system of care partner agencies for any purpose. Eighteen percent blended general funds to provide services, 11 percent pooled funds to provide services on a case-by-case basis, and 7 percent contributed jointly to fund specific staff positions. Most often only mental health, child welfare, and education contributed to blended or braided funding. Occasionally juvenile justice contributed.

## **Systems of Care Improve Over Time in Implementing Family-Focused, Individualized, and Accessible Care**

Consistent with the President’s New Freedom initiative, mental health care should be consumer and family driven. To realize this transformation, systems of care will be required to provide a coordinated array of services designed to address the specific needs of each child and family served, placing an emphasis on the strengths of the child and family in developing an individualized service plan. In order to implement principles to their full extent, systems of care must set up the infrastructure in a way that supports service delivery according to the principles.

Trends over time for implementing family-focused, individualized, and accessible care were examined for the 24 communities described on page 51. A significant increase in assessment ratings suggest that systems of care are doing well in implementing these principles and that there is a trend toward improvement over time. However, more efforts are needed to achieve the highest level of family-focused, individualized, and accessible care.

**Figure 29. Mean System of Care Assessment Scores for Communities with Complete Data across Assessment Points 1, 2, and 3: Family Focused, Individualized, and Accessible**



Number of communities = 24.

Note: Scores range from 1 to 5, with a score of 1 indicating no efforts were made to achieve the goal of implementing the principle and a score of 5 indicating that efforts made were effective and the goal was met with little or no need for improvement.

<sup>a</sup>  $F = 9.04, df1 = 2, df2 = 46, p < .001.$

<sup>b</sup>  $F = 14.48, df1 = 2, df2 = 46, p < .001.$

<sup>c</sup>  $F = 16.58, df1 = 2, df2 = 46, p < .001.$

## *Systems of Care Have Achieved Family-Focused Care in Many Ways*

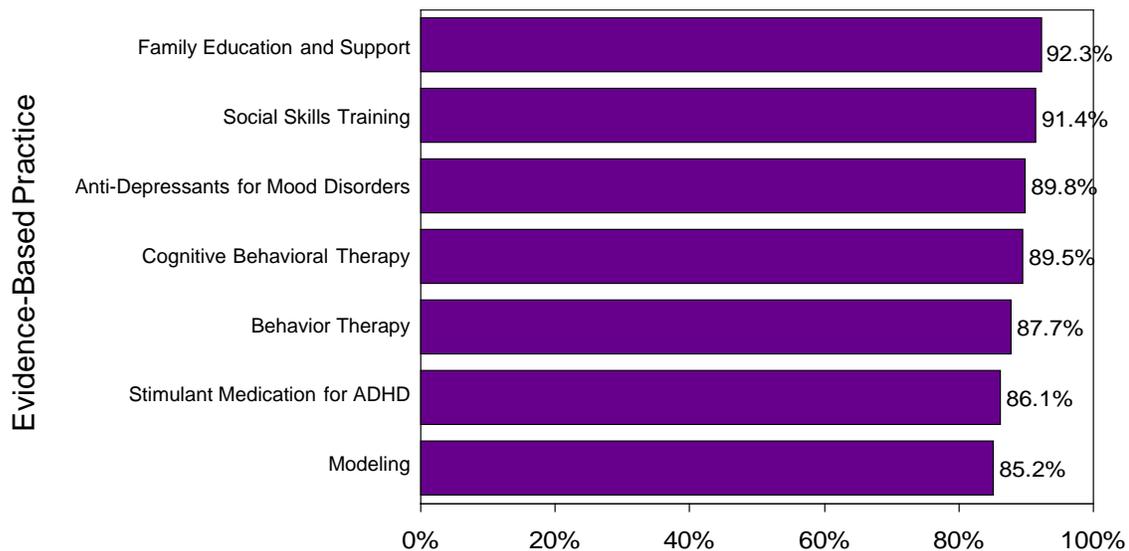
Data from the system of care assessment indicate that communities have been successful in addressing the goal of implementing family-focused care.

- At the infrastructure level, communities showed a strong representation of families on governing bodies, for example:
  - 89 percent of communities reported having family representatives involved in governance, and
  - families comprised 16 percent of governing body members across all communities.
- At the service delivery level, 94 percent of communities reported that families were involved in various aspects of the service planning process, including:
  - identifying and choosing service options,
  - identifying goals and objectives,
  - selecting and rejecting participants for the service planning process, and
  - rejecting service options.
- Many communities also stated that families had the final decision in service planning, and the plan of care was not official until approved by a family member. Additionally, 75 percent of systems of care reported their families felt respected and comfortable during the intake process, which is central to making families feel their opinions are being heard and acted upon.

### ***Evidence-Based Practices (EBPs) Are Perceived as Effective, but Should Be Utilized More Extensively***

A survey of mental health direct service providers ( $n = 467$ ) participating in system of care communities<sup>64</sup> indicated that the majority of evidence-based practices (EBPs) they were asked to rate from an extensive list of EBPs were considered effective in yielding positive outcomes for children and families. The EBPs identified as effective by at least 85 percent of providers include family education and support, social skills training, anti-depressants for mood disorders, cognitive behavioral therapy, behavior therapy, stimulant medication for ADHD, and modeling.

**Figure 30: Evidence-Based Practices Most Commonly Identified as Effective by Surveyed Providers**



Number of providers = 467.

Despite providers' positive perceptions of many EBPs, there is a large discrepancy between perceived effectiveness of EBPs and their actual use by some providers. Far fewer providers reported using an EBP treatment than those who reported that these practices were effective. Reasons providers reported for why they did not use EBPs included lack of time, high cost, excessively rigid protocols, lack of training, and lack of agency support.

Providers generally reported using those EBPs they perceived to be most effective. Related findings include the following:

- Providers' rates of use of EBPs ranged from 1 percent (self-control instruction training) to 67.5 percent (cognitive behavioral therapy, or CBT).
- Wraparound (21.6 percent) and rational emotive therapy (17.1 percent) were the next most utilized EBPs among providers after CBT.

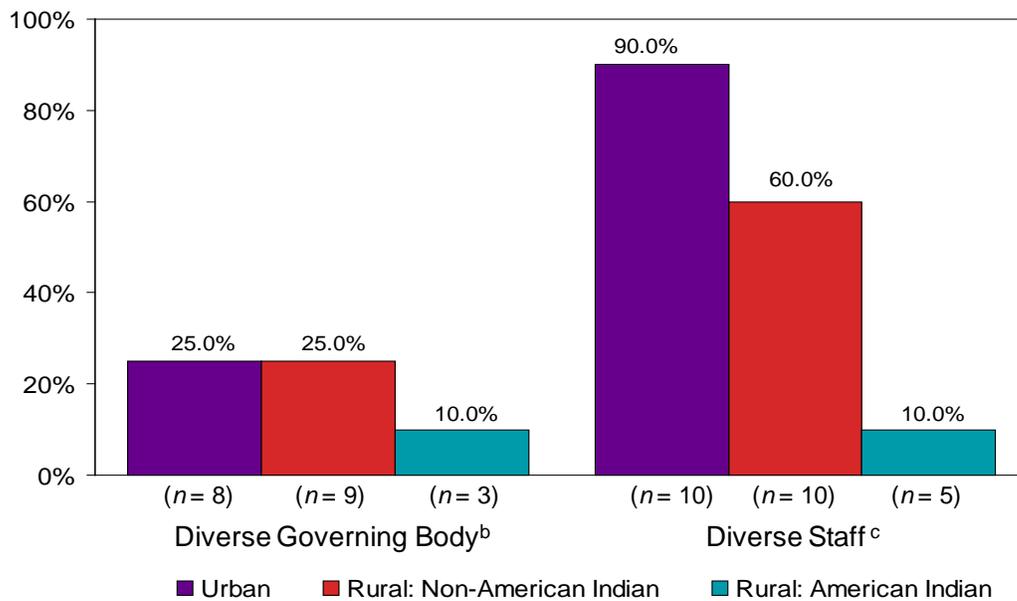
<sup>64</sup> For more information on the Evidence-Based Treatment Survey, see Appendix B for a description and Tables E-10 and E-11 in Appendix E for participant characteristics and more detailed survey findings.

### **System of Care Communities Are Achieving Diversity in Staff but Need Greater Diversity in Governing Bodies**

Improving the delivery of services to minority populations may be facilitated by diversity within a system of care, both in terms of staff and governing body members. A staff that reflects the service population’s racial and ethnic make-up may be able to provide more relevant services and foster an environment that encourages a comfort level to enter and remain in services. Further, a diverse governing body is more likely to have an awareness of the needs of minority and underserved populations than a nondiverse group.

The findings show that diverse system of care communities (i.e., those serving populations that are at least 26 percent non-White) assessed in 2003 had been successful at hiring diverse program staff. Urban communities had achieved greater staff diversity than rural communities. Communities were less successful at achieving diversity in the governing bodies.

**Figure 31. Diversity of Governing Bodies and Program Staff  
in Urban and Rural Systems of Care in 2003<sup>a</sup>**



<sup>a</sup> Sample size (n) refers to number of system-of-care communities.  
<sup>b</sup> At least 26% of children served are non-White and at least 26% of governing body members are non-White.  
<sup>c</sup> At least 26% of children served are non-White and at least 26% of system-of-care staff are non-White.

## **Caregivers Are Satisfied with System of Care Provider Efforts to Promote Culturally Competent Practices**

Cultural competence in systems of care should include

- using the child and family’s preferred language during service delivery;
- providing culturally appropriate services that nurture child and family strengths and customs that are part of their cultural heritage;
- involving racial and ethnic minority groups from the community in system of care committees, governance, and service delivery;
- delivering services through providers who represent the racial and ethnic composition of the community; and
- addressing disparities in access, quality of service, outcomes, and satisfaction with services (U.S. Department of Health and Human Services [DHHS], 2002, pp. 35–36).

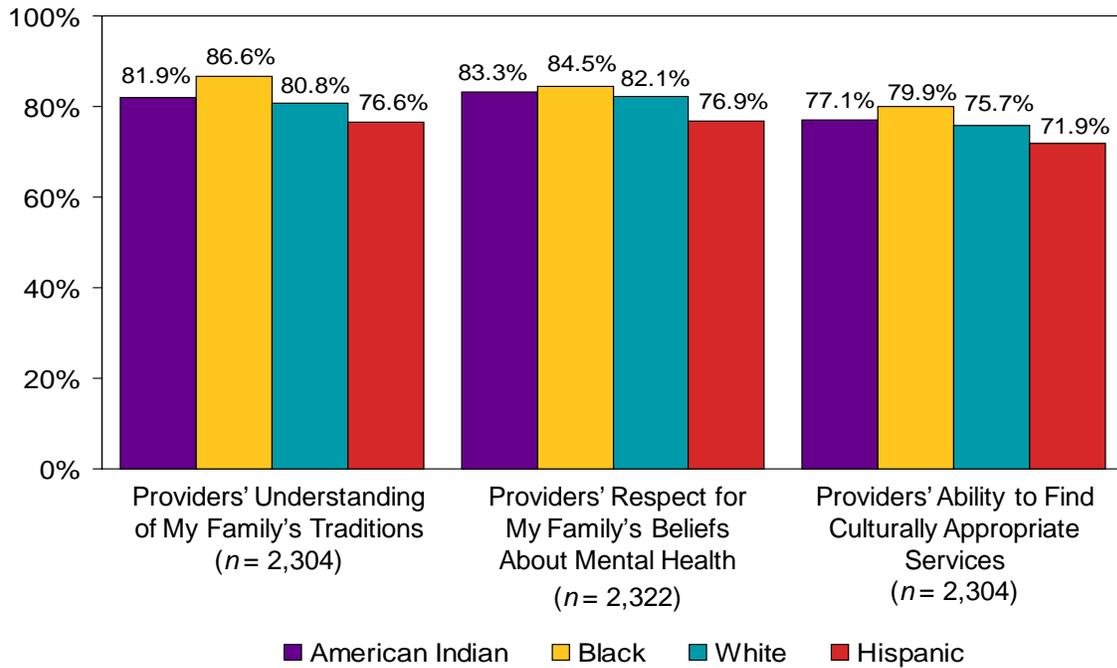
After receiving services for 1 year, more than 75 percent of all caregivers reported they were satisfied with providers’ respect for their family’s beliefs and values about mental health, understanding of their family’s traditions, and ability to find services that acknowledge the positive traditions of their family’s culture and tradition. Ratings of satisfaction varied as a function of the caregivers’ race/ethnicity. In general, Hispanic caregivers were the least satisfied with all aspects of culturally competent provider practices, and Black caregivers were the most satisfied. Black caregivers rated their satisfaction with their providers’ understanding of their family traditions significantly higher than Hispanic caregivers did.<sup>65</sup> While the patterns of differences by race/ethnicity were similar for ratings of satisfaction with providers’ respect for beliefs about mental health and providers’ ability to find culturally appropriate services, these differences were not statistically significant.

Communities report incorporating children and families’ cultural needs in service planning and delivery; some have made cultural assessment a standard part of the assessment process. However, some communities that serve non-English-speaking populations have not made materials available in languages other than English, while others report making limited or no outreach efforts into ethnic communities. The results reflect improvements that have been made throughout system of care communities, but also indicate that more efforts need to be devoted to ensuring that culturally appropriate services are available throughout the program.

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<sup>65</sup>  $\chi^2(3) = 13.7, p = .003$

**Figure 32. Caregiver Satisfaction with Cultural Competence of Services Received after 12 Months in Systems of Care by Race/Ethnicity**

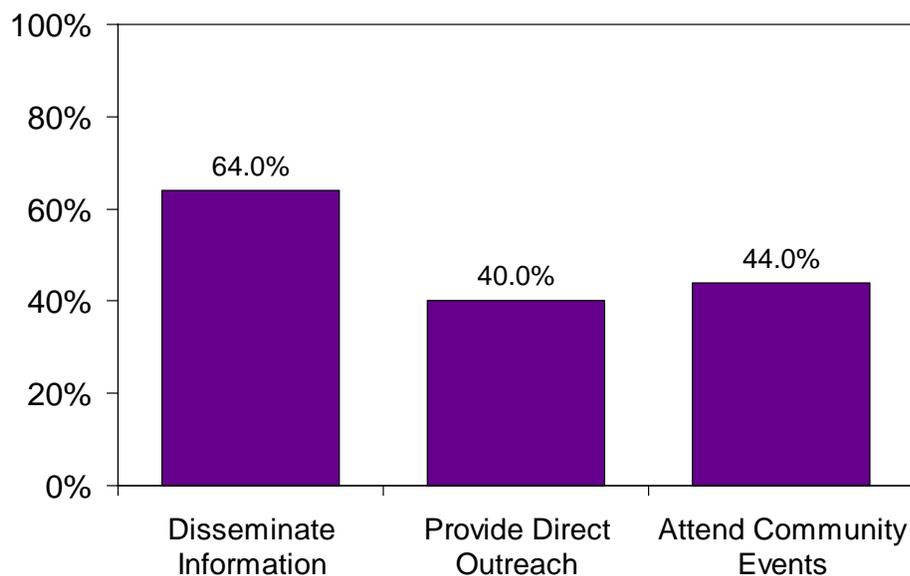


### System of Care Communities Have Made Efforts To Reduce Stigma

Participating communities have done the following to reduce stigma and provide messages emphasizing the importance of mental health:<sup>66</sup>

- Sixty-four percent developed and disseminated brochures, pamphlets, fact sheets, and newsletters about mental illness directly to families through mass mailings and to service providers, community-based agencies, schools, places of worship, and doctors' offices.
- Forty-four percent of communities participate in community events (e.g., local parades, health fairs, school fairs, and other community-wide activities) to distribute written materials and speak with children and families attending these events.
- Forty percent of communities provide direct outreach to specific racial and ethnic communities located within their respective catchment areas.

Figure 33. Efforts Made by System of Care Communities To Reduce Stigma



Number of communities = 45.

<sup>66</sup> The national evaluation is not required to assess stigma reduction or the effectiveness of community-level communication and outreach campaigns. However, these findings are reported by system of care communities voluntarily. Therefore, the results may not be reflective of the actual number of sites that are working to reduce stigma.

### ***System of Care Communities Have Implemented Strategies for Suicide Prevention***

The 2003 system of care assessment findings from 45 participating communities indicated that:

- 22 percent described program efforts specifically directed toward the prevention of suicide. For example, one community implemented an early identification program in middle and high schools to identify youth at risk for suicide in the community's catchment area and to provide early suicide prevention.
- 13 percent reported training to grant-funded staff and service providers on suicide risk factors, implementing prevention interventions, and treating young people who had attempted suicide.
- 6 percent reported implementing an aggressive social marketing campaign that included:
  - television, radio, and newspaper public service announcements;
  - a Web site to alert parents to early warning signs; and
  - a newspaper article that allowed readers to perform a "self test" about the issue of suicide.

These positive efforts to prevent suicide are beginning to make inroads within the field of children's mental health. Although this approach is designed for children and youth with severe emotional disorders, systems of care offer a sound philosophical model that could form the foundation for a more comprehensive approach to suicide prevention for all children and youth.

### **Data Sharing and Integration Efforts Identified Common Strategies and Barriers**

Analysis of cross-agency integration and sharing of 36 communities indicated that 61.1 percent of the communities can access at least one management information system. Most of the communities (90.9 percent) with access to data from other agencies have used at least one of these databases. In terms of access to data from specific agencies, 57.1 percent of the communities can access mental health data, approximately 25 percent can access social service data, less than one-fourth (22.6 percent) can access juvenile justice data, only six communities indicated that they have access to education data, and a little over 10 percent of the communities can access physical health data.

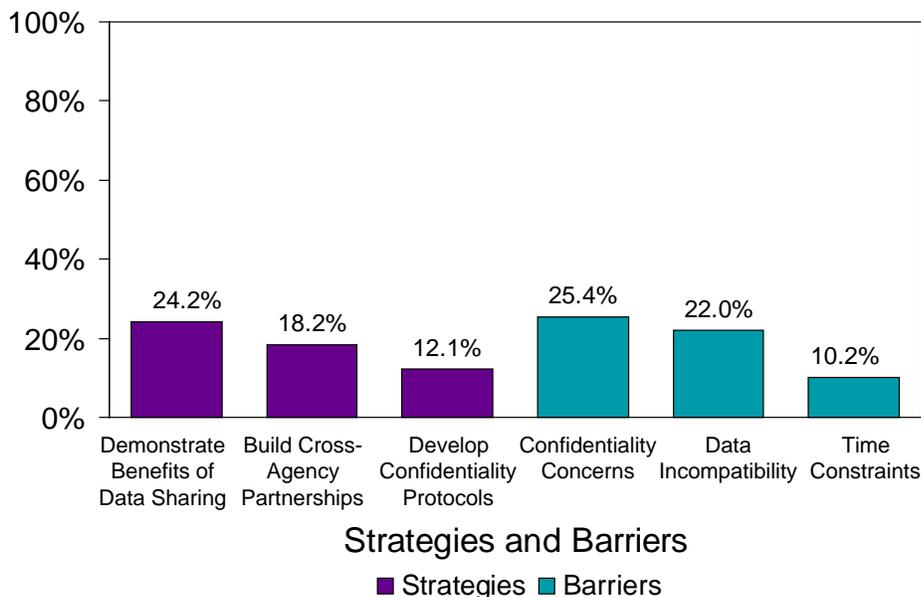
Figure 34 presents the most common strategies and barriers endorsed by participating system of care communities in a survey about their data sharing and integration efforts. The most common strategies used by system of care communities to share and integrate data among grant communities and child-serving agencies effectively include:

- demonstrating the benefits of integrated data to relevant stakeholders;
- building overall cross-agency partnerships; and
- setting clear rules and procedures regarding informed consents, privacy, and data transfers.

The top barriers to integrating or sharing data include:

- confidentiality issues regarding release of child-specific information,
- incompatible cross-agency data and/or platforms, and
- lack of time and/or trained staff to work with various databases.

**Figure 34. Site-Reported Strategies and Barriers in Cross-Agency Data Integration**



Number of communities = 32.

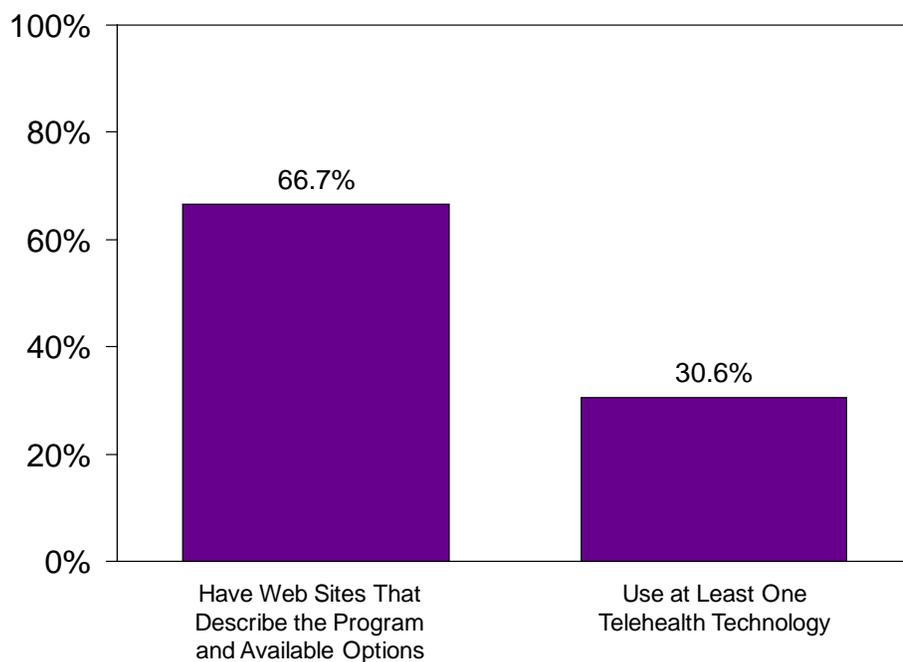
### **Grant Communities Used the Internet To Provide Services and Disseminate Program Information**

Almost 67 percent of grant communities created Web sites that describe their programs, educate families about services and supports available to them, and provide other health and community-related information.<sup>67</sup> There was considerable variety in organizational and content features among these community Web sites, despite their common purpose and function.

Nearly one-third of surveyed communities reported using at least one telehealth technology to provide services to their clients, including:

- videoconferencing assessments,
- long-distance case conferencing,
- remote therapy, and
- use of e-mail to send appointment reminders.

**Figure 35. Technology Use by Systems of Care**



Number of communities = 36.

<sup>67</sup> See Table E-12 in Appendix E for a list of system of care community Web sites.

## EMERGING ISSUES AND RECOMMENDATIONS FOR THE FUTURE

More specific conceptual frameworks will be needed as the agency moves ahead to provide the leadership necessary to transform the mental health care system. To that end, the Child, Adolescent and Family Branch (CAFB) within the Center for Mental Health Services (CMHS) is focusing efforts to guide the further development of the CMHI.

Several priority areas have emerged from the recent federally sponsored comprehensive reviews and policy studies of mental health services to focus future system of care program evaluation and service system development (DHHS, 1999, 2001a, 2001b). These areas include understanding stigma; improving recognition and assessment of mental health needs; reducing racial, ethnic, and socioeconomic disparities in access to mental health services; and addressing the lack of evidence-based treatment in service delivery approaches.

Recommendations from recent publications and responses from the field have identified strategies for addressing the crisis in children's mental health, including establishing a more active Federal role in promoting a research agenda that will add to the knowledge base; enhancing and creating new partnerships among researchers, practitioners, youth and families, industry, and Federal regulatory, research, and service agencies; continuing to educate the general public through public awareness campaigns; shifting to a primary care approach in the children's mental health care system; developing and implementing effective substance abuse prevention programs; enhancing workforce knowledge and skills; and attending to the sustainability of service delivery systems (NFC, 2003; U.S. Public Health Service, 2000; World Health Organization, 2001).

Driven by fundamental philosophical principles and effective research-based practices, the system of care approach is a documented strategy being used to transform the children's mental health system nationwide. By emphasizing the strengths of children and youth, individualizing service planning and service delivery, and offering a comprehensive array of services and supports coordinated at the system and service delivery levels, systems of care are demonstrating effectiveness in meeting the mental health challenges of children and youth and the needs of their families.

### ***Summary of Recommendations***

The following list of recommendations touches upon important areas for the future of systems of care. In particular, emphasis and resources need to be placed in a few substantive areas, including training of front-line workers, cultural competence, use of evidence-based treatments, and the use of technology to provide mental health services in remote areas. The recommendations fall within the six goals identified within the President's New Freedom Commission Report. A part of this transformation will emphasize the delivery of evidence-based approaches to children, youth, and families in a culturally competent manner that emphasizes the elimination of disparities. The findings from this report show that systems of care are moving in the direction toward meeting these goals. For example:

- Communities have implemented strategies toward suicide prevention and children with a history of suicide attempts improved in their emotional and behavioral problems over time.
- Communities have moved toward family-driven care as more communities involve families at both the infrastructure and service delivery levels.
- Caregivers report satisfaction with the culturally competent manner in which services are provided and communities are increasing the diversity in their staff in an effort to eliminate disparities in care.
- Communities are implementing more evidence-based practices.

The following list is suggestive, not comprehensive, but it delineates substantive areas of focus over the next several years.

**A. Emphasize the Importance of the Integration of Mental Health, Substance Abuse, and Primary Health Care Services**

- Provide advanced training in basic child development, assessment techniques, and mental health service operations for front-line and primary health care workers in all child-serving systems.
- Outsource and co-locate staff members or family advocates with training in assessment to all child-serving agencies.

**B. Continue To Develop a Consumer- and Family-Driven System**

- Define and operationalize a meaningful definition of “family-driven” that can serve to propel the system of care philosophy and service delivery.
- Develop a means of improving youth involvement throughout system of care communities.
- Create linkages or interagency relationships to ensure that caregivers receive needed treatment and supports.

**C. Continue To Implement Techniques to Eliminate Disparities in Access to Care**

- Provide training within service agencies in culturally competent and culturally relevant child, youth, and family assessment.
- Create a knowledge base about effective interventions targeted toward community and individual characteristics that would be available to child-serving agencies.
- Promote research and evaluation efforts to identify factors that affect services needed by various subgroups of participating children and youth, as well as when those services are received, and their degree of effectiveness.

**D. Undertake Further Efforts To Develop Effective Evidence-Based Treatments**

- Ensure that system of care programs identify and understand the following before implementing an evidence-based treatment:
  - provider knowledge of evidence-based treatments,

- provider willingness to participate in training and provide evidence-based treatments as intended,
- service needs of children and their caregivers, and
- caregiver interest and capacity to participate directly in evidence-based treatments.
- Ensure that communities provide adequate training, resources, and support to providers to implement evidence-based treatments as intended.
- Evaluate the effectiveness of the evidence-based treatment (including a fidelity assessment) at the community level to ensure the treatment is appropriate to the setting.
- Prepare communities to implement multiple treatment models to meet the needs of a diverse service population.

#### E. Use Technology To Improve Care

- Educate all consumers in use of the Internet so they can access health care information resources.
- Make the Internet available to consumers at service facilities to increase accessibility.
- Educate service providers in how to utilize Web-based technology with consumers who live in remote areas; continue developing useful applications to meet the demand for this technology.
- Develop Web-based management information systems to improve cross-agency collaboration and information sharing.

#### F. Implement Effective Continuous Quality Improvement (CQI) Procedures

- Institute benchmarking procedures that allow performance standards to be evaluated across system of care communities.
- Use CQI information to improve allocation of resources to system of care communities and inform executive decision-making.

## GPRA PROGRAM INDICATORS FOR FY 2004

GPRA Program Indicators	Actual Performance
<b>(1) Increase in number of children receiving services</b>	
▪ FY 2004 Target: 8,000	10,521
<b>(2) Increase in percentage of children attending school 75% or more of time after 12 months</b>	
▪ FY 2004 Target: 80%	90.9%
<b>(3) Increase in percentage of children with no law enforcement contacts at 6 months</b>	
▪ FY 2004 Target: 50%	67.6%
<b>(4) Decrease in utilization of inpatient facilities at 6 months</b>	
▪ FY 2004 Target: -3.65 days	-2.03 days
<b>(5) Decrease inpatient costs</b>	
▪ FY 2004 Target: -\$6,326,097	-\$6,923,310

In 2004, a Program Assessment Rating Tool (PART) review of the CMHI was conducted. PART examined the program in the following areas:

- Is the program purpose clear?
- Does the program address a specific interest, problem, or need?
- Is the program designed to have a significant impact in addressing the interest, problem, or need?
- Is the program designed to make a unique contribution in addressing the interest, problem, or need (i.e., not needlessly redundant of any other Federal, State, local, or private efforts)?
- Is the program optimally designed to address the interest, problem, or need?

The PART assessment awarded full points to the program in all areas with the exception of the point on addressing the problem and received a Moderately Effective assessment rating. The PART review noted that the program was addressing mental health system change in funded communities, but that its larger national impact was not known. It also was noted that an evaluation of the impact of the program's public information and education campaign to increase public awareness was needed.

The PART review of the CMHI was helpful in providing guidance about directions for program development. As a result of the PART review, the CMHI has undertaken the following activities to enhance the program and program performance:

- Prior to the 2004 PART review, the program implemented additional activities to capture program impact, including the development of GPRA measures of long-term outcomes and a measure of program sustainability 5 years post funding. The baseline for this measure was established in FY 2004, with 100 percent of communities funded in 1993 found to be sustained in 2004.
- The baseline for the program's efficiency measure was established in 2003 (decrease inpatient care costs). Targets for cost reductions were exceeded in FY 2004. The CMHI also developed a long-term efficiency measure to assess long-term outcomes on this indicator of program progress.
- Efforts to initiate evaluation of the program's social marketing campaign were underway in FY 2004. A survey of customer satisfaction with the technical assistance that system of care sites received from the National Communications Campaign Team, which was charged with the program's social marketing effort, was conducted in 2002 by COSMOS. The report of this survey was completed in February, 2004

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# APPENDICES

**APPENDIX A**  
**SYSTEM OF CARE COMMUNITIES FUNDED THROUGH THE**  
**COMPREHENSIVE COMMUNITY MENTAL HEALTH SERVICES**  
**FOR CHILDREN AND THEIR FAMILIES PROGRAM**  
**(1993–2004)**

GRANT COMMUNITY	LOCATION	STATE
<b>Phase I (22 Grants Awarded in 1993 and 1994)</b>		
<b>Cycle I (4 Grants Awarded in October 1993)</b>		
East Baltimore Mental Health Partnership	East Baltimore, Maryland	Maryland
Stark County Family Council and Southern Consortium	Stark County and 10 southeastern counties	Ohio
The Village Project	Charleston and Dorchester counties	South Carolina
ACCESS	Statewide	Vermont
<b>Cycle II (7 Grants Awarded in February 1994)</b>		
Children's Systems of Care/California 5	Riverside, San Mateo, Santa Cruz, Solano, and Ventura counties	California
COMCARE	Sedgwick County	Kansas
Wings for Children and Families	Piscataquis, Hancock, Penobscot, and Washington counties	Maine
Olympia (formerly Doña Ana County Child and Adolescent Collaborative)	Doña Ana County	New Mexico
Pitt-Edgecombe-Nash Public-Academic-Liaison Project (PEN-PAL)	Pitt, Edgecombe, and Nash counties	North Carolina
Project REACH Rhode Island	Statewide	Rhode Island
Wraparound Milwaukee	Milwaukee County	Wisconsin
<b>Cycle III (11 Grants Awarded in September and November 1994)</b>		
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

GRANT COMMUNITY	LOCATION	STATE
KanFocus	13 southeastern counties	Kansas
K'é Project	Navajo Nation <sup>a</sup>	Arizona, New Mexico, Utah
Families Reaching in Ever New Directions (FRIENDS)	Mott Haven	New York
Partnerships Project	Minot, Bismarck, and Fargo regions	North Dakota
New Opportunities	Lane County	Oregon
South Philadelphia Family Partnership Project	South Philadelphia	Pennsylvania
City of Alexandria System of Care	City of Alexandria	Virginia
<b>Phase II (23 Grants Awarded in 1997 and 1998)</b>		
<b>Cycle IV (9 Grants Awarded in October 1997)</b>		
The Jefferson County Community Partnership	Jefferson County	Alabama
Children's Mental Health Services Initiative	San Diego County	California
Kmihqitahasultipon ("We Remember") Project	Passamaquoddy Tribe Indian Township <sup>a</sup>	Maine
Southwest Community Partnership	Detroit	Michigan
Nebraska Family Central	22 central counties	Nebraska
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 <sup>a</sup>	North Dakota
Children's Upstream Services	Statewide	Vermont
Northwoods Alliance for Children and Families	Forest, Langlade, Lincoln, Marathon, Oneida, and Vilas counties	Wisconsin
<b>Cycle V (14 Grants Awarded in October and November 1998)</b>		
Tampa-Hillsborough Integrated Network for Kids (THINK) System	Hillsborough County	Florida
Kentucky Bridges Project	3 Appalachian regions	Kentucky
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 <sup>a</sup>	Michigan
Partnership With Families	St. Charles County	Missouri
Families First and Foremost	Lancaster County	Nebraska

GRANT COMMUNITY	LOCATION	STATE
Neighborhood Care Centers	Clark County	Nevada
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
Clark County Children's Mental Health Initiative	Clark County	Washington
Children and Families in Common	King County	Washington
With Eagle's Wings	Wind River Indian Reservation <sup>a</sup>	Wyoming
<b>Phase III (22 Grants Awarded in 1999 and 2000)</b>		
<b>Cycle VI (20 Grants Awarded in October 1999)</b>		
Yuut Calilriit Ikaiyuquulluteng ("People Working Together") Project	Delta region of southwest Alaska <sup>a</sup>	Alaska
Project MATCH (Multi-Agency Team for CHildren)	Pima County	Arizona
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
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

GRANT COMMUNITY	LOCATION	STATE
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 <sup>a</sup>	South Dakota
Nashville Connection	Nashville	Tennessee
Mountain State Family Alliance	12 counties	West Virginia
<b><i>Cycle VII (2 Grants Awarded in May and July 2000)</i></b>		
A-KO-NES Wraparound System of Care	Humboldt and Del Norte counties <sup>a</sup>	California
Kidsnet Rockdale	Rockdale and Gwinnett counties	Georgia
<b>Phase IV (29 Grants Awarded in 2002, 2003, and 2004)</b>		
<b><i>Cycle VIII (18 Grants Awarded in October 2002)</i></b>		
Ch'eghutsen' A System of Care	Fairbanks Native Association <sup>a</sup>	Alaska
Glenn County	Glenn County	California
Sacramento Model System of Care	Sacramento County	California
San Francisco System of Care	San Francisco	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—Working Together For Our Children	Broward County	Florida
I'Famagu'onta (Our Children)	Territorywide	Guam
Building on Each Other's Strengths	Statewide	Idaho
System of Care—Chicago	Chicago	Illinois
Show-Me Kids Project	Barry, Christian, Green, Lawrence, Stone, and Taney counties	Missouri
Keeping Families Together in New York City	New York City	New York
Choctaw Nation CARES	Choctaw Nation of Oklahoma <sup>a</sup>	Oklahoma

GRANT COMMUNITY	LOCATION	STATE
Oklahoma State Department of Human Services	Beckham, Canadian, Kay, Oklahoma, and Tulsa, counties	Oklahoma
Puerto Rico Mental Health Initiative for Children	Llorens Torres Housing Project in San Juan, Municipality of Gurabo	Puerto Rico
Border Children's Mental Health Initiative	El Paso County	Texas
Children's Voices, Family Choices, Community Solutions: Building Blocks for Healthy Families	Fort Worth	Texas
<b><i>Cycle IX (7 Grants Awarded in September 2003)</i></b>		
La Familia Sana/The Healthy Family System of Care	Monterey County	California
Urban Trails	Oakland <sup>a</sup>	California
Louisiana Says YES to Children with Mental Health Needs and Their Families (LA--YES)	Jefferson, Orleans, Plaquemines, St. Bernard, and St. Tammany parishes	Louisiana
Transitions: St. Louis System of Care	St. Louis County and City	Missouri
Project TAPESTRY: Weaving Solutions for Child Mental Health	Cuyahoga County	Ohio
Mid-Columbia Child and Family Partnership	Gilliam, Hood River, Sherman, and Wasco counties	Oregon
YouthNet--A Comprehensive Mental Health Treatment Network for Children and Youth	Chester, Lancaster, and York counties and Catawba Indian Nation	South Carolina
<b><i>Cycle X (4 Grants Awarded in September 2004)</i></b>		
Kentuckians Encouraging Youth to Succeed (KEYS)	Boone, Campbell, Carroll, Gallatin Grant, Kenton, Owen, and Pendleton counties	Kentucky
Kids Integrated Delivery System for Montana (KIDS)	Statewide and Crow Indian Nation	Montana
Albany County Family Partnerships for Change	Albany County	New York
Erie County Family Voices	Erie County	New York

<sup>a</sup>American Indian/Alaska Native tribe.

## APPENDIX B

### DESCRIPTION OF STUDY COMPONENTS

#### DESCRIPTIVE AND OUTCOME STUDIES OF CHILDREN AND FAMILIES SERVED

##### *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 emotional and behavioral problems and social functioning, and changes in caregiver strain and family functioning over time. Descriptive information is to be collected on every child who is 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 longitudinal outcome study is to assess changes over time among children 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 longitudinal 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).
- Be no younger than 5 years old and no older than 17.5 years old at the time of intake (baseline).
- 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.

## 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 B-1.

**Table B-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.

Service Delivery (continued)	
<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 B-2.

**Table B-2. Definition of System of Care Principles**

Principle	Definition
<b>Family Focused</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>Individualized</b>	Provision of care that is expressly child centered, addresses child-specific needs, and recognizes and incorporates child-specific strengths.
<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?”

## 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 have developed 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 a system of care service structure.

## SERVICES & COSTS STUDY (MIS STUDY)

A Web-based MIS and Technology Survey was designed and conducted in 2004 to assess the degree of data integration across various agencies in system of care communities and the completeness of service and costs data captured in the databases of the grantees. The survey was administered to all system of care communities funded between 1999 and 2003. The survey design was divided into four sections. Part A ascertained whether communities have access to, used, or linked to other agency's databases. Next, communities provided contact information for agencies whose data they can access. All communities indicated whether they can gain access to Medicaid records of children they serve. Also, all communities provided information on whether part of their funding is allocated to integrating data with other child-serving agencies. If the communities have access to at least one MIS, then they were required to provide up to three successful strategies they used to integrate the data and up to three barriers they encountered when integrating data. If they responded that they did not have access to another agency's data, the communities answered whether they had attempted to integrate data with these other agencies and, if so, what barriers they faced when attempting to integrate data. Next, respondents replied whether they stored sources of funding other than CMHS grant dollars electronically and, if so, how often the information was recorded. If the information is not captured electronically, then communities were asked to report whether there are plans to do so.

In addition to cross-agency integration questions covered in Part A, Part B of the MIS and Technology Survey assessed various services available to children in system of care communities and whether the information about these services is captured in the local MIS. If the site offered the listed service and captured the data in the MIS, then respondents indicated what data were captured, such as the unit of service, charge, payment, and adjustment for that service.

In the third section of the survey, Part C, respondents were given an opportunity to list unique services offered in their community that were not listed in the previous section and to describe the information captured by an electronic MIS for these unique services.

Finally, Part D of the survey determined technology use, including use of telemedicine and a Web site. Specifically, communities were asked whether they offered psychiatric assessments, remote therapy sessions, or case conferencing via videoconferencing, or whether they used e-mail to set appointment reminders. Finally, respondents reported which, if any, telehealth technologies were Medicaid reimbursable.

To administer the survey, individual e-mails were sent to project directors, principal investigators, and local site evaluators at each funded community to request that the MIS and Technology Survey be completed. Each e-mail contained a brief description of the survey, a unique user identification and password for each individual to access the survey Web site, and technical support contact information. The Web site was monitored to determine who had completed the survey and to update the completion rate. For communities that did not complete the survey by the due date, telephone calls were made to determine any problems the user may be having in accessing or completing the survey. Liaisons assigned to each community were updated on their community's progress in completing the survey and assisted in reminding communities to complete the survey. Overall, 36 communities completed the survey in time for the analysis included in this report.

## TREATMENT EFFECTIVENESS STUDY

Two treatment effectiveness studies are currently underway. One study is occurring in two communities funded in 1998, and one has recently been initiated in two communities funded in 1999. A third study will be implemented in two communities that received funding during the 2002 and 2003 fiscal funding cycles. These studies examine the effectiveness of an evidence-based treatment provided to a selected group of children with specific diagnoses served within CMHS-funded systems of care. The goal of the studies is to examine whether children who receive an evidence-based treatment delivered in a system of care experience better outcomes and maintain those outcomes longer than children in the same system who do not receive the evidence-based treatment.

### *Study Design*

The study design reflects an integrated process that dovetails with the general child and family outcome study for the national evaluation. This involves initially identifying communities for the study, documenting procedures for the specific intervention to be studied, assessing whether the intervention is implemented as designed, and utilizing a methodology and data collection strategy that builds upon the framework for the child and family outcome study to follow cases across time. In addition to the core data collected on children participating in the child and family outcome study, treatment-specific outcomes related to the evidence-based treatment are assessed before and after participation in the treatment. Treatment fidelity measures also assess whether the evidence-based treatments are implemented as intended.

All children enrolled into the study must first be enrolled in the local system of care program. The CMHS-funded systems of care are designed to serve children with serious mental health disorders. Thus, the standard severity criteria that are used to enroll children into systems of care also apply to children in the treatment effectiveness study.

In addition to the system of care criteria, children are screened for the disorder most relevant to treatment being examined. For the studies involving communities funded in 1998 and 1999 these disorders include attention-deficit/hyperactivity disorder, conduct disorder, and oppositional defiant disorder identified through the Diagnostic Interview Schedule for Children (DISC) Predictive Scales. Details of the evidence-based treatment effectiveness study have been described in previous reports to Congress (CMHS, 2002).

## EVIDENCE-BASED TREATMENT SURVEY

The Evidence-Based Treatment (EBT) Survey is a 65-item survey (completion time approximately 20 minutes) administered to direct mental health service providers to children with serious emotional disturbance and their families. The EBT Survey contains questions related to the mental health clinician's knowledge, training, and use of evidence-based treatments in their practice. The EBT Survey was designed as a Web-based survey; however, hard copies of the survey were available upon request.

A two-stage process was used to identify a comprehensive list of mental health clinicians from each targeted community. Target communities included the 23 system of care communities funded in 1997–98 and the two non-funded communities selected for the Phase II comparison study. The first stage of the participant identification process involved a structured telephone call to the community contact (i.e., project director in funded communities and field office staff in comparison communities) during which they were asked to identify all agencies and organizations that provide mental health services to children eligible for, or enrolled in, system of care services. There were 28 first-stage contacts; one contact each from 26 sites in 23 system of care funded communities and two non-funded comparison study communities. Five hundred and seventy-one appropriate agencies were identified at stage one (range 1–129 agencies per stage one contact, average number of agencies per stage one contact = 19.7). The second stage of the participant identification process involved contact with each agency/organization identified at stage one, and a request for a list (including names and addresses) of their mental health clinicians (1,669 appropriate respondents identified; range 1–90 per agency; average number of appropriate respondents per stage two contact = 5.5). In addition, the second stage contacts were also asked to identify other local agencies/organizations that provide services to these same children. Any agency/organization not previously identified at stage one was added to the stage two contact lists. A proportional sample (using an average of 50 respondents per community for a total of 1,402 respondents as the target) was drawn from the list of identified potential respondents. Sampling was performed within any system of care community where 80 or more potential respondents were identified. No sampling was performed for system of care communities with fewer than 80 identified potential respondents or comparison communities.

A five-stage mailing process was used to recruit selected potential respondents for the cross-sectional EBT Survey (Dillman, 2000). Data collection for the EBT Survey began in late August 2003 continued through January 2004. Survey responses were received from 615 individuals from the 26 sites who were identified via 23 system of care funded sites and two comparison sites. The response rate for the EBT Survey was 44 percent, consistent with published Web-based response rates (Dillman, et al., 2001; Frazee, Hardin, Brashears, Smith, & Lockaby, 2002; Ladner, Wingenbach, & Raven, n.d.). Twenty-seven percent of respondents completed the survey via hard copy and 73 percent via the Web.

## PHASE II LONGITUDINAL COMPARISON STUDY

### *Community Selection and Characteristics*

This section provides detailed information regarding the process used to select communities for the Phase II comparison studies. Beginning in the fall of 1999, two grant communities were selected from among the 23 communities funded in 1997–98 for the Phase II comparison studies. In each case, the CMHS-funded system of care community was matched with a non-CMHS-funded community that used a different approach to serving children. The following criteria were used in selecting each of the comparison study communities:

- **Service delivery approach.** Grant-funded communities were selected based on the extent of their progress in developing a system of care. “Mature” systems were identified based on system of care assessment data and information from State and local experts familiar with the communities. Eligible comparison communities were identified that did not have Federal funding to support the development of a system of care. Because it was not possible to conduct a formal system of care assessment for site selection purposes, alternative methods were used to determine whether service delivery approaches in potential matched communities differed from the system of care approach. These alternative methods, which included site visits, discussions with local agency directors, and discussions with State mental health representatives, were used to determine whether service delivery approaches in potential matched comparison communities contrasted with the system of care approach.
- **Geographic, demographic, and economic characteristics.** Data from the 1990 Census were used in selecting matching non-system of care communities, including population size, child age distributions, racial and ethnic composition, per capita income, size of the catchment area, the percentage of people living below the poverty level, and the percentage of adults with high school educations. When possible, geographical proximity was also considered in selecting comparison communities to ensure they would be subject to the same State mental health structure and health care changes (e.g., managed care). Statewide adoption of the system of care service delivery approach made this infeasible for one grant community, resulting in the recruitment of a non-system of care community outside of the State. For the Phase II comparison studies, an in-state comparison was selected and the system of care and their comparison communities were located within a few hours of each other in both the urban and the rural settings.

- **Rate of child enrollment.** The number of children and families entering the system of care needed to be large enough to ensure a sample size that would yield sufficient statistical power to detect significant group differences if they existed. Communities had to be able to enroll the number of children needed to meet the required sample size during the proposed study period.
- **Child referral patterns.** Depending on the referring agency, children entering mental health services may differ in terms of presenting problems, risk factors, types of disorders, and mental health needs (Walrath, Nickerson, Crowel, & Leaf, 1998). To facilitate the selection of children with similar degrees and types of emotional and behavioral problems, similarity in referral patterns was examined when selecting matching communities.
- **Caregiver consent.** The final selection criterion was the community's willingness to participate in the comparison study.

A few potential communities were unwilling to participate because of other planned activities during the proposed study period. The selection of multiple comparison pairs provided the opportunity to examine multiple replications of the comparison study design with pairs that have different geographical and demographic characteristics. Unique to the Phase II studies was the selection of comparison pairs from both a rural and an urban environment. This was the first opportunity to test the comparison study approach in a rural community setting in the Midwest with vastly different geographical and demographic characteristics when compared to the pairs selected in the urban South.

### **Methods and Study Sample**

All children between the ages of 5 and 17.5 at the time they entered services provided by the grant program in the system of care communities were eligible to participate in the comparison studies. To enroll children with behavioral and emotional problems of a similar severity to those served by programs in system of care communities, providers serving children with serious emotional disturbance were identified in the comparison communities. To enroll a similar sample of children in the systems of care and matched comparison communities, an eligibility screening process was applied in the comparison communities to identify children who met the eligibility criteria for the study so that only those children with serious emotional disturbance were enrolled in the study. Children in the comparison communities were determined to be eligible for the study if they had a *DSM-IV* diagnosis and also met one of the following criteria: history of or at risk for out-of-home placement, and/or participation in special education for serious emotional disturbance and/or involvement in the juvenile justice system. Enrollment in each community was closely monitored, and selection of children was modified as needed to more closely equate samples in each matched pair. Selecting children with equivalent severity of problems in matched communities created challenges because communities differed in the ways in which families of children with comparable problems could access services.

### **Recruitment and Data Completion**

Enrollment in the Phase II comparison studies began in August 1999 in the rural communities, and in September 1999 in the urban communities. Prior to the start of the

comparison study, enrollment goals were set based on two primary criteria: (a) the number of study participants needed to generalize results from this study to other populations of children with severe behavioral and emotional disorders, and (b) the capacity of local mental health agencies to enroll children into services before entering the study. Given these criteria, goals for study enrollment were set at 225 children in each community. This is the minimum number of children needed, based on power estimates appropriate to the study design, to detect changes in the outcomes of children and family served within each community over the course of the study.

Baseline enrollment of children and families into the Phase II comparison studies ended April 30, 2003, and follow-up data collection ended in May 2004. A total of 943 children were enrolled into the study across all four communities. Follow-up interviews were completed with 816 families at 6 months, 774 families at 12 months, 691 families at 18 months, 560 families at 24 months, 440 families at 30 months, and 324 families at 36 months. The number of completed interviews at each assessment point and overall completion rates (determined by number of families who have reached a follow-up assessment period at this stage of the study) for each of the four communities are presented in Table B-3.

**Table B-3. Number of Completed Interviews and Retention Rates for Each Community at Each Data Collection Point**

	Baseline Interviews	6-Month Interviews	12-Month Interviews	18-Month Interviews	24-Month Interviews	30-Month Interviews	36-Month Interviews
<b>Urban SOC</b>	202	148	144	129	103	79	46
<b>Urban Comparison</b>	192	166	166	143	119	95	70
<b>Rural SOC</b>	321	290	270	254	203	167	138
<b>Rural Comparison</b>	228	212	194	165	135	99	70
<b>Total</b>	943	816	774	691	560	440	324
<b>Completion Rates</b>		87%	82%	86%	80%	75%	74%

## SUSTAINABILITY STUDY

The sustainability study explores the extent to which systems of care are maintained after funding from the CMHI 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 includes a Web-based survey completed by key stakeholders in graduated sites and those nearing graduation. Hard copies of the survey are available upon request. Four stakeholders in each grant community complete the Web-based survey: the current or former

site 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.

In 2004, the survey was completed by grantees that received funding in 1993–94 and 1997. After reviewing the survey data, follow-up telephone interviews were conducted with two of the respondents in each community to obtain additional clarifying and explanatory information related to survey responses and to further explore factors and strategies that affect the maintenance of systems of care. In addition, a telephone interview also will be conducted with the children’s mental health director at the State level in each State where local communities are included in the study, in order to obtain a State perspective on maintaining systems of care over time.

The report resulting from this study will be geared to leaders of local systems of care as well as to Federal and State policymakers to enable them to consider sustainability issues at the earliest phases of system development and to learn about strategies and approaches that may enhance their efforts to build enduring systems of care. Findings from this study will be provided in a future report when the study is completed.

## PRIMARY CARE STUDY

The purpose of the primary care study is to investigate the role of primary health care providers in systems of care and to understand further the impact of services provided within primary care on child and family outcomes. More specifically, the study is designed to answer four main questions:

- What is the physical health status, health care utilization, and health care financing status of children with serious emotional disturbance participating in the program?
- How do the physical health status, health care utilization, and health care financing status of children 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 with serious emotional disturbance who are being served within systems of care?
- How does the health care provided by primary health care providers influence child and family outcomes?

Stakeholders including youth, caregivers, service providers, project directors, and primary care personnel, will guide this three-part study. Part 1 addresses 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 involves 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 CMHI-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, addresses 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 will be obtained from 10 discussion groups with various stakeholder groups involving nine or fewer participants. 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, addresses the question, “How does the health care provided by primary care providers influence child and family outcomes?” During Part 3 of the study, primary care providers will be asked to complete the Primary Care Provider Survey. Providers may respond via a Web-based survey or a paper-and-pencil version of the survey. The targeted yearly sample total will be 320 providers. Findings from this study will be provided in a future report when the study is completed.

## FAMILY-DRIVEN STUDY

The family-driven study is being conducted by a field-based team of family members and youth who have experience with communities funded by the CMHS grant. This study is being conducted under the leadership of the Federation of Families for Children’s Mental Health and the Georgia Parent Support Network in collaboration with ORC Macro. The perspectives and interests of families raising children with serious emotional disturbance who are enrolled in system of care grant communities govern all aspects of this special study. The Federation of Families for Children’s Mental Health serves as the lead agency for the study, and was charged with establishing a study team. The study team includes staff members of the national evaluation team.

The broad goal of the family-driven study is to examine how families experience systems of care. Which aspect of that experience would be studied was left up to study team members to determine. So, from its inception, the study was to be driven, in concept, methods, and delivery, by family members. This study endeavors to determine what is important to families and how best to obtain information from them. The intention is to use the results of this study to make service systems more responsive to families.

Family members and experts in the field were engaged to assist in the development of a research question. Study team members used the results of this process to generate the broad study question: Does family engagement in systems of care impact child and family outcomes? The team defined engagement as “the act of doing something for your child, yourself, or your family that determines or derives from a care plan or supports the delivery of services and supports.” Engagement can also be associated with “participation of families

and youth with the intention of improving or enhancing service planning and delivery of treatment, services, family supports, or care.”

Following this process, four focus groups were conducted (three with caregivers and one with youth) to obtain final consensus regarding the study question, to explore viability of terminology, and to obtain feedback on study methods. Results indicated that all agreed that the question developed by the team was an important one. However, there was also agreement that the term *engagement* was confusing. In its place they recommended the use of *involvement* or *participation*. Results regarding data collection approaches differed across focus groups. All four of the proposed methods (i.e., in-person interview, mailout survey, mailout survey followed by telephone call, and focus group) were supported by at least one group.

The study team fully used all results of the focus groups to inform decisions regarding study design. The study design involves the use of a mixed-methods approach. A mailout survey has been developed. The survey has both closed- and open-ended items that assess the extent of family involvement in the system of care. A subsample of the survey respondents will be asked to participate in these focus groups. In addition, the survey distribution and data collection process were pilot-tested with nine family members whose children were receiving services in funded system of care communities.

Three of the 22 communities funded in 1999 and 2000 will participate in the study. In each community, 60 caregivers who have children participating in the longitudinal outcome study of the CMHI program will receive a mailed copy of the questionnaire. Two focus groups of nine people or less designed to last 1 hour 30 minutes each also will be conducted in the three communities. The participants in the focus groups will be recruited from the pool of individuals who returned their questionnaire to the research team. Participants will be asked to sign a consent form giving the study team permission to obtain their longitudinal outcome study data from the local evaluator. These data will be linked to the family-driven study data to address the research questions. Findings from this study will be provided in a future report when the study is completed.

## CULTURALLY COMPETENT PRACTICES STUDY

The culturally competent practices study is designed to investigate several key components of cultural competence. It will (a) assess system of care service providers’ level of competence across several domains of cultural competence (i.e., attitudes, knowledge, and practice), (b) increase understanding of the role that organizations and agencies play in hindering or facilitating culturally competent service provision, (c) investigate the relationship between child and family outcomes and culturally competent services, and (d) help identify areas in which training, resources, and research need to be directed in order to increase the pervasiveness of cultural competence in services (i.e., to move beyond cultural awareness and assessment).

Data collection strategies used in this study include

- a Web-based Culturally Competent Practices Survey that will be completed by service providers in all system of care communities funded in 2002–03, and
- focus groups with service providers, caregivers, youth, administrators, and program staff in communities with high and low levels of culturally competent services.

Data from the longitudinal child and family outcome study also will be used to assess the relationship between outcomes and cultural competence. Findings from this study will be provided in a future report when the study is completed.

## APPENDIX C

### DESCRIPTIVE AND OUTCOMES DATA TABLES

#### METHODS AND STUDY SAMPLE

The longitudinal 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 who participated in the outcome study, regardless of whether they remained in or exited system of care services. In the evaluation during Years 2 through 4 of funding, each grant community is expected to enroll approximately 284 families for communities funded in 1997–98 and 276 families for communities funded in 1999–2000, although this figure 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 C-1 presents study enrollment and data completion rates through March 2004 for each community funded in 1997–2000.

Table C-1. Study Enrollment and Program Interview Completion as of March 2004

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	6-Month	12-Month	18-Month	24-Month	30-Month	6-Month	12-Month	18-Month	24-Month	30-Month
Grant Communities Funded in 1997 and 1998																	
1	1177	244	244	244	223	196	162	155	154	133	110	81	63.5%	63.1%	59.6%	56.1%	50.0%
2	811	306	306	306	306	306	183	240	231	220	181	106	78.4%	75.5%	71.9%	59.2%	57.9%
3	181	182	182	182	178	177	172	32	21	12	3	0	17.6%	11.5%	6.74%	1.7%	0.0%
4	485	117	117	117	113	112	97	78	63	26	17	7	66.7%	53.9%	23.0%	15.2%	7.2%
5	483	466	447	446	421	382	341	353	313	287	227	162	73.1%	67.6%	64.2%	50.9%	38.5%
6	678	629	629	628	606	518	417	312	245	172	134	86	49.6%	39.0%	28.4%	25.9%	20.6%
7	85	86	58	58	58	58	58	6	0	0	0	0	10.3%	0.0%	0.0%	0.0%	0.0%
8	2224	317	317	317	296	267	241	136	108	57	44	15	42.9%	34.1%	19.3%	16.5%	6.2%
9	153	155	154	154	154	153	133	118	80	60	43	25	76.6%	52.0%	39.0%	28.1%	18.8%
10	430	223	223	203	165	131	98	99	74	47	37	26	44.4%	36.5%	28.5%	28.2%	26.5%
11	599	255	249	234	211	195	168	139	113	91	78	54	55.8%	48.3%	43.3%	40.0%	32.1%
12	257	89	88	88	79	68	57	35	22	16	12	11	39.8%	25.0%	20.3%	17.7%	19.3%
13	222	145	145	142	134	130	112	59	41	28	17	8	40.7%	28.9%	21.0%	13.1%	7.1%
14	299	210	206	190	174	161	130	132	100	68	46	32	64.1%	52.6%	39.1%	28.6%	24.6%
15	470	285	266	196	146	120	91	128	81	51	37	26	48.1%	41.3%	34.9%	30.8%	28.6%
16	276	232	215	175	160	149	120	152	106	88	63	51	70.7%	60.6%	55.0%	42.3%	42.5%
17	331	214	214	209	193	175	149	156	135	114	92	77	72.9%	64.6%	59.1%	52.6%	51.7%
18	421	115	115	112	97	74	60	17	13	3	1	1	14.8%	11.6%	3.1%	1.4%	1.7%
19	182	133	130	115	100	81	52	75	51	37	22	4	57.7%	44.4%	37.1%	27.2%	7.7%
20	236	252	240	213	184	165	111	199	164	134	100	35	82.9%	77.0%	72.8%	60.6%	31.5%
21	788	336	335	323	303	262	178	253	204	168	104	70	75.5%	63.2%	55.5%	39.7%	39.3%
22	297	194	192	170	147	129	107	109	79	48	43	31	56.8%	46.5%	32.7%	33.3%	29.0%
23	207	80	79	75	68	49	18	25	11	0	0	0	31.7%	14.7%	0.00%	0.00%	0.00%
Grant Communities Funded in 1999 and 2000																	
24	208	86	71	54	42	25	9	19	9	1	2	0	26.8%	16.7%	2.4%	8.0%	0.0%
25	122	161	156	120	68	58	53	108	59	44	35	26	69.2%	49.2%	64.7%	60.3%	49.1%

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	6-Month	12-Month	18-Month	24-Month	30-Month	6-Month	12-Month	18-Month	24-Month	30-Month
26	359	128	114	89	29	16	7	66	34	11	2	2	57.9%	38.2%	37.9%	12.5%	28.6%
27	191	26	26	24	21	15	6	10	6	3	0	0	38.5%	25.0%	14.3%	0.0%	0.0%
28	253	250	233	189	148	117	44	112	68	52	23	9	48.1%	36.0%	35.1%	19.7%	20.5%
29	59	32	27	20	18	16	11	15	11	6	5	3	55.6%	55.0%	33.3%	31.3%	27.3%
30	161	127	126	114	87	69	38	80	57	32	21	14	63.5%	50.0%	36.8%	30.4%	36.8%
31	39	48	48	40	20	17	4	15	4	3	1	0	31.3%	10.0%	15.0%	5.9%	0.0%
32	96	90	80	63	39	25	15	57	33	25	13	11	71.3%	52.4%	64.1%	52.0%	73.3%
33	391	315	296	241	184	131	68	184	122	76	31	13	62.2%	50.6%	41.3%	23.7%	19.1%
34	151	40	34	21	10	6	0	12	3	2	0	0	35.3%	14.3%	20.0%	0.0%	0.0%
35	89	106	102	79	77	63	40	76	60	52	33	21	74.5%	76.0%	67.5%	52.3%	52.5%
36	266	193	191	180	160	137	100	159	122	99	73	58	83.3%	67.8%	61.9%	53.3%	58.0%
37	350	216	187	173	141	118	83	98	70	43	17	9	52.4%	40.5%	30.5%	14.4%	10.8%
38	136	106	100	89	77	66	41	51	38	20	15	2	51.0%	42.7%	26.0%	22.7%	4.9%
39	198	188	186	176	157	127	82	77	40	12	6	2	41.4%	22.7%	7.6%	4.7%	2.4%
40	188	210	198	175	146	115	75	127	102	76	49	17	64.1%	58.3%	52.1%	42.6%	22.7%
41	483	370	346	285	230	185	137	185	143	83	55	31	53.5%	50.2%	36.1%	29.7%	22.6%
42	96	71	70	60	41	34	26	41	23	17	12	5	58.6%	38.3%	41.5%	35.3%	19.3%
43	34	38	34	34	26	13	4	20	0	16	0	0	58.8%	0.0%	61.5%	0.0%	0.0%
44	180	149	141	126	109	83	48	100	90	64	35	15	71.0%	71.4%	58.7%	42.2%	31.3%
45	938	338	337	316	246	206	152	157	96	58	36	13	46.6%	30.4%	39.0%	28.2%	23.7%

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

<sup>b</sup> Baseline 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), or 18 months or longer (for 18-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; and (e) 30-month outcome sample: cases with 30-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%. For example, 6-month follow-up completion rate for Site 2 was calculated as: (240 / 306) x 100% = 78.4%.

## DEMOGRAPHIC CHARACTERISTICS, CLINICAL STATUS, AND CHILD AND FAMILY OUTCOMES

The rest of this appendix provides detailed information on the baseline child and family characteristics (Table C-2). Information on child and family clinical and functional outcome indicators at intake, 6 months, 12 months, 18 months, 24 months, and 30 months are presented for children and families enrolled in grant communities funded in 1997 and 1998; information on child and family clinical and functional outcome indicators at intake, 6 months, and 12 months are presented for those enrolled in grant communities funded in 1999 and 2000 (Table C-3). These pieces of information on the outcomes at each data collection point do not represent changes over time. Rather, they provide *descriptive* information on these outcomes at each data collection point. Some children and families may not have data collected across all data collection points.

Table C-2. Baseline Child and Family Characteristics

	Grant Communities Funded in 1997–98			Grant Communities Funded in 1999–2000		
	Overall Sample	Descriptive Sample	Outcome Sample	Overall Sample	Descriptive Sample	Outcome Sample
<b>Gender</b>	(n = 11,758)	(n = 6,571)	(n = 5,187)	(n = 6,085)	(n = 2,955)	(n = 3,130)
Male	66.0%	65.7%	66.2%	66.8%	64.4%	69.1%
Female	34.0%	34.3%	33.8%	33.2%	35.6%	30.9%
<b>Age</b>	(n = 11,673)	(n = 6,518)	(n = 5,155)	(n = 6,079)	(n = 2,949)	(n = 3,130)
Mean	11.0 years	10.5 years	11.7 years	12.2 years	12.3 years	12.1 years
0–5 Years	19.2%	27.5%	8.8%	4.1%	4.2%	4.0%
6–11 Years	24.6%	19.3%	31.3%	33.0%	32.1%	33.8%
12–15 Years	37.8%	33.4%	43.3%	45.6%	44.6%	46.6%
16 Years or Older	18.4%	19.8%	16.6%	17.3%	19.1%	15.6%
<b>Race and Ethnicity<sup>a</sup></b>	(n = 10,701)	(n = 6,102)	(n = 4,599)	(n = 5,952)	(n = 2,869)	(n = 3,083)
African American	21.7%	23.0%	20.0%	31.5%	31.2%	31.7%
American Indian	8.6%	5.8%	12.3%	10.6%	14.3%	7.3%
Asian	0.8%	0.8%	0.9%	0.8%	0.8%	0.7%
Hispanic Ethnicity	10.4%	9.0%	12.2%	10.2%	7.7%	12.5%
Native Hawaiian or Pacific Islander	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
White	61.9%	63.1%	60.3%	52.1%	48.4%	55.5%
Other	1.7%	1.9%	1.5%	1.5%	1.7%	1.3%
Bi-racial/Multiracial	5.7%	4.3%	7.6%	7.6%	5.2%	9.7%
<b>Custody</b>	(n = 8,728)	(n = 3,727)	(n = 5,001)	(n = 5,843)	(n = 2,750)	(n = 3,093)
Two Parents	26.1%	24.9%	27.0%	23.9%	24.0%	23.7%
Mother	44.5%	43.6%	45.2%	42.1%	39.9%	44.0%
Father	4.4%	4.6%	4.2%	4.3%	4.0%	4.6%
Adoptive Parent(s)	3.7%	3.5%	3.9%	4.7%	3.2%	6.1%
Foster Parent(s) or Ward of State	9.8%	10.3%	9.4%	11.1%	14.0%	8.6%
Grandparents	6.0%	6.0%	5.9%	6.9%	6.6%	7.2%
Other	5.5%	7.1%	4.4%	6.9%	8.2%	5.8%
<b>Poverty Level</b>	(n = 7,072)	(n = 2,737)	(n = 4,335)	(n = 4,160)	(n = 1,498)	(n = 2,662)
Below Poverty	56.2%	59.0%	54.4%	56.2%	57.6%	55.4%
At Poverty	13.6%	13.6%	13.6%	10.1%	11.3%	9.4%
Above Poverty	30.2%	27.4%	32.0%	33.7%	31.0%	35.2%
<b>Medicaid Recipient</b>	(n = 10,374)	(n = 5,327)	(n = 5,047)	(n = 5,836)	(n = 2,769)	(n = 3,067)
Yes	72.2%	74.0%	70.2%	73.9%	76.3%	71.7%

Grant Communities Funded in 1997–98

Grant Communities Funded in 1999–2000

	Overall Sample	Descriptive Sample	Outcome Sample	Overall Sample	Descriptive Sample	Outcome Sample
<b>Number of Child Risk Factors</b>	(n = 8,815)	(n = 3,740)	(n = 5,075)	(n = 5,252)	(n = 2,153)	(n = 3,099)
Mean	1.5	1.5	1.5	1.5	1.3	1.6
	(n = 11,766)	(n = 6,625)	(n = 5,141)	(n = 6,085)	(n = 2,955)	(n = 3,130)
No Risk Factors	24.7%	18.2%	33.0%	27.8%	27.5%	28.1%
One Risk Factor	18.9%	14.9%	24.0%	22.0%	19.1%	24.8%
Two Risk Factors	14.3%	11.1%	18.5%	16.7%	12.1%	21.0%
Three or More Risk Factors	42.1%	55.8%	24.5%	33.5%	41.3%	26.1%
<b>Number of Family Risk Factors</b>	(n = 8,578)	(n = 3,651)	(n = 4,927)	(n = 4,984)	(n = 1,946)	(n = 3,038)
Mean	2.6	2.3	2.7	2.6	2.5	2.7
	(n = 11,654)	(n = 6,625)	(n = 5,029)	(n = 6,085)	(n = 2,955)	(n = 3,130)
No Risk Factors	10.7%	9.9%	11.8%	11.9%	10.9%	13.0%
One Risk Factor	12.3%	9.9%	15.6%	13.7%	11.9%	15.3%
Two Risk Factors	13.7%	10.3%	18.1%	14.1%	11.1%	16.9%
Three or More Risk Factors	63.2%	69.9%	54.5%	60.3%	66.2%	54.8%
<b>Referral Sources</b>	(n=8,258)	(n = 3,501)	(n = 4,757)	(n = 5,210)	(n = 2,558)	(n = 2,652)
Court	9.9%	12.1%	8.4%	7.8%	7.2%	8.3%
Corrections	9.8%	11.7%	8.4%	1.8%	1.5%	2.0%
School	19.4%	19.5%	19.2%	14.3%	11.6%	16.9%
Mental Health Centers	24.6%	17.3%	30.0%	42.6%	37.8%	47.1%
Substance Abuse Treatment Clinics	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%
Physical Health Care Agencies	1.7%	1.7%	1.8%	0.7%	0.9%	0.5%
Child Welfare Agencies	11.9%	12.1%	11.8%	12.1%	14.0%	10.4%
Caregiver	9.0%	9.1%	9.0%	8.7%	10.8%	6.7%
Self	2.1%	1.7%	2.4%	1.5%	1.6%	1.4%
Other	11.4%	14.7%	9.0%	10.6%	14.5%	6.7%
<b>Child Risk Factors</b>						
Previous Psychiatric Hospitalization	24.5% (n = 8,740)	23.2% (n = 3,687)	25.5% (n = 5,053)	34.7% (n = 5,002)	27.9% (n = 1,950)	39.1% (n = 3,052)
Physically Abused	26.8% (n = 8,539)	26.5% (n = 3,603)	27.0% (n = 4,936)	27.3% (n = 4,940)	28.2% (n = 1,957)	26.8% (n = 2,983)
Sexually Abused	20.9% (n = 8,346)	18.6% (n = 3,543)	22.6% (n = 4,803)	23.0% (n = 4,807)	22.4% (n = 1,920)	23.4% (n = 2,887)
Run Away	33.7% (n = 8,644)	33.8% (n = 3,628)	33.6% (n = 5,016)	30.0% (n = 5,018)	26.3% (n = 1,959)	32.3% (n = 3,059)
Attempted Suicide	14.6% (n = 8,661)	13.4% (n = 3,632)	15.5% (n = 5,029)	16.1% (n = 4,973)	10.8% (n = 1,928)	19.4% (n = 3,045)
Substance Abuse	23.9% (n = 8,710)	28.4% (n = 3,672)	20.6% (n = 5,038)	17.4% (n = 5,052)	19.0% (n = 1,988)	16.4% (n = 3,064)
Sexually Abusive to Others	7.3% (n = 8,565)	6.8% (n = 3,619)	7.7% (n = 4,946)	8.9% (n = 4,978)	9.2% (n = 1,949)	8.8% (n = 3,029)

Grant Communities Funded in 1997–98

Grant Communities Funded in 1999–2000

	Overall Sample	Descriptive Sample	Outcome Sample	Overall Sample	Descriptive Sample	Outcome Sample
<b>Family Risk Factors</b>						
Domestic Violence	49.2% (n = 8,405)	45.3% (n = 3,488)	51.9% (n = 4,917)	51.9% (n = 4,742)	52.1% (n = 1,820)	51.7% (n = 2,922)
Mental Illness in Biological Family	53.0% (n = 8,283)	49.8% (n = 3,452)	55.4% (n = 4,831)	60.2% (n = 4,585)	57.4% (n = 1,715)	61.8% (n = 2,870)
Psychiatric Hospitalization of Biological Parents	38.0% (n = 4,005)	35.7% (n = 1,509)	39.4% (n = 2,496)	41.6% (n = 2,520)	37.9% (n = 858)	43.6% (n = 1,662)
Biological Parents Convicted of a Crime	46.2% (n = 8,118)	44.0% (n = 3,344)	47.7% (n = 4,774)	49.1% (n = 4,500)	48.5 (n = 1,674)	49.5% (n = 2,826)
Substance Abuse in Biological Family	65.7% (n = 8,393)	63.9% (n = 3,502)	66.9% (n = 4,891)	66.2% (n = 4,726)	68.1% (n = 1,783)	65.1% (n = 2,943)
Treatment Received for Substance Abuse	52.1% (n = 4,934)	51.8% (n = 1,972)	52.3% (n = 2,962)	57.2% (n = 2,713)	55.8% (n = 1,013)	58.0% (n = 1,700)
<b>Diagnosis<sup>b</sup></b>	(n = 6,957)	(n = 2,970)	(n = 3,987)	(n = 4,409)	(n = 2,142)	(n = 2,267)
Conduct Disorder	12.6%	15.5%	10.5%	9.7%	9.0%	10.3%
ADHD	33.4%	26.8%	38.2%	41.6%	36.5%	46.3%
Oppositional Defiant Disorder	25.4%	22.3%	27.8%	29.2%	28.9%	29.5%
Mood Disorder	30.3%	28.7%	31.5%	36.0%	32.3%	39.5%
Adjustment Disorder	13.9%	14.7%	13.3%	11.1%	14.1%	8.2%
Substance Use	9.5%	10.7%	8.5%	4.8%	5.0%	4.6%
Post-Traumatic Stress Disorder	8.2%	7.2%	8.9%	9.4%	9.3%	9.6%
Impulsive Control Disorder	4.6%	4.8%	4.4%	4.4%	4.2%	4.6%
Disruptive Behavior Disorder	5.7%	6.2%	5.3%	5.5%	5.9%	5.2%
Learning and Related Disorders	5.4%	5.2%	5.5%	4.4%	4.1%	4.7%
Mental Retardation	3.0%	2.8%	3.3%	4.7%	4.7%	4.8%
Anxiety Disorder	4.3%	3.3%	5.0%	4.6%	3.9%	5.2%
Psychosis	2.1%	1.4%	2.5%	2.7%	1.7%	3.6%
Autism and Related Disorder	1.5%	0.7%	2.0%	2.7%	2.5%	3.0%
V Code	5.9%	5.9%	6.0%	5.6%	5.7%	5.6%
Other	7.0%	5.4%	8.2%	7.6%	7.4%	7.9%

	Grant Communities Funded in 1997–98			Grant Communities Funded in 1999–2000		
	Overall Sample	Descriptive Sample	Outcome Sample	Overall Sample	Descriptive Sample	Outcome Sample
<b>Presenting Problems<sup>c</sup></b>	(n = 7,873)	(n = 3,618)	(n = 4,255)	(n = 5,697)	(n = 2,670)	(n = 3,027)
Mean	5.2	4.9	5.5	6.5	5.5	7.5
Sadness	22.2%	19.7%	24.4%	34.3%	33.6%	34.9%
Suicide Ideation	12.8%	12.6%	13.0%	18.4%	16.8%	19.9%
Suicide Attempt	6.3%	6.3%	6.3%	8.9%	6.7%	10.9%
Physical Aggression	41.5%	40.5%	42.4%	48.5%	43.7%	52.8%
Property Damage	20.0%	18.3%	21.4%	22.9%	16.5%	28.6%
Runaway	14.4%	14.5%	14.3%	13.9%	11.4%	16.1%
Hyperactive–Impulsive	29.3%	25.8%	32.2%	40.6%	33.5%	46.9%
Attentional Difficulties	27.6%	24.1%	30.6%	41.0%	33.1%	47.9%
Police Contact	22.1%	24.4%	20.1%	22.9%	19.5%	25.8%
Academic Difficulties	33.9%	33.7%	34.1%	42.9%	37.8%	47.4%
Non-Compliance	45.6%	46.4%	45.0%	49.1%	42.5%	54.9%
Poor Self-Esteem	22.7%	19.1%	25.8%	31.3%	24.8%	37.0%
Truancy	16.9%	18.8%	15.2%	12.5%	11.2%	13.6%
Alcohol and Substance Use	14.5%	16.2%	13.0%	11.5%	11.8%	11.2%
Poor Peer Interaction	26.0%	23.8%	27.9%	31.3%	24.8%	37.0%
Extreme Verbal Abuse	20.9%	18.1%	23.2%	23.8%	16.9%	29.9%
Theft	16.6%	16.2%	16.9%	15.5%	11.4%	19.1%
Anxious	19.8%	17.8%	21.5%	30.8%	26.0%	35.1%
Sleep Disorders	10.6%	9.0%	12.0%	15.7%	11.3%	19.5%
Eating Disorders	5.4%	4.2%	6.5%	7.2%	5.4%	8.8%
Somatic Complaints	5.6%	4.7%	6.3%	7.5%	5.7%	9.1%
Self-Injury	8.9%	8.1%	9.6%	13.6%	11.8%	15.2%
Social Contact Avoidance	7.6%	6.6%	8.4%	12.0%	8.4%	15.1%
Sexual Assault	4.4%	3.9%	4.9%	5.1%	4.4%	5.7%
Threat to Life of Others	9.6%	9.1%	9.9%	13.5%	11.1%	15.5%
Fire Setting	5.8%	5.2%	6.3%	7.0%	5.3%	8.6%
Cruelty to Animals	3.7%	2.8%	4.5%	5.9%	4.2%	7.3%
Inappropriate Bowel Movements	2.5%	2.1%	2.8%	3.0%	2.4%	3.6%
Over-Dependence on Adults	6.1%	4.7%	7.3%	11.8%	7.3%	15.8%
Bladder Difficulties	3.1%	2.8%	3.3%	5.2%	3.7%	6.5%
Sexual Acting Out	6.8%	6.5%	7.0%	9.9%	9.3%	10.5%
Other Problems	21.5%	20.5%	22.4%	21.0%	23.7%	18.7%

<sup>a</sup> Because an individual may chose more than one racial background, the race variable may sum to more than 100%.

<sup>b</sup> Because children may have more than one diagnosis, the diagnosis variables may sum to more than 100%.

<sup>c</sup> Because children may present with more than one problem, the variable presenting problems may sum to more than 100%.

Table C-3 (Part 1). Child and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, 24 Months, and 30 Months

Grant Communities Funded in 1997–98						
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)
<b>Child Behavior Checklist (CBCL)</b>						
Activities Competence	40.7 (8.9) (n = 3,248)	40.3 (8.8) (n = 2,167)	40.1 (9.0) (n = 1,745)	39.9 (9.0) (n = 1,351)	39.8 (9.0) (n = 1,000)	39.0 (8.7) (n = 614)
Social Competence	36.3 (8.9) (n = 3,203)	37.4 (9.0) (n = 2,129)	37.7 (8.8) (n = 1,732)	38.3 (9.1) (n = 1,341)	38.4 (8.9) (n = 991)	38.5 (8.9) (n = 614)
School Competence	34.8 (8.6) (n = 2,748)	36.4 (9.0) (n = 1,816)	36.3 (9.1) (n = 1,472)	37.2 (9.2) (n = 1,123)	37.6 (9.5) (n = 800)	36.9 (9.3) (n = 481)
Internalizing Problems	64.8 (11.3) (n = 3,677)	62.2 (11.7) (n = 2,447)	60.6 (11.9) (n = 1,964)	59.5 (12.0) (n = 1,505)	58.3 (12.0) (n = 1,121)	58.4 (12.6) (n = 688)
Externalizing Problems	69.8 (10.6) (n = 3,678)	66.9 (11.3) (n = 2,448)	65.3 (11.4) (n = 1,965)	63.9 (11.9) (n = 1,505)	63.1 (11.8) (n = 1,122)	62.9 (11.8) (n = 689)
<b>Total Problems</b>	<b>69.9 (10.2)</b> <b>(n = 3,678)</b>	<b>67.0 (11.1)</b> <b>(n = 2,446)</b>	<b>65.3 (11.3)</b> <b>(n = 1,965)</b>	<b>63.9 (11.8)</b> <b>(n = 1,502)</b>	<b>62.8 (11.9)</b> <b>(n = 1,120)</b>	<b>62.8 (12.1)</b> <b>(n = 688)</b>
<b>Child and Adolescent Functional Assessment Scale (CAFAS)</b>						
Mean Total Scale Score	106.2 (46.2) (n = 4,089)	91.1 (47.8) (n = 2,667)	86.0 (48.4) (n = 2,116)	81.4 (48.7) (n = 1,604)	77.0 (49.3) (n = 1,210)	75.5 (49.6) (n = 758)
Home Role <sup>a</sup>	71.1% (n = 4,081)	60.2% (n = 2,663)	56.6% (n = 2,113)	53.5% (n = 1,595)	51.1% (n = 1,205)	48.9% (n = 752)
School Role	76.7% (n = 4,080)	67.8% (n = 2,653)	64.3% (n = 2,112)	62.7% (n = 1,600)	57.5% (n = 1,201)	55.2% (n = 755)
Community Role	39.8% (n = 4,904)	31.9% (n = 2,671)	28.9% (n = 2,118)	25.0% (n = 1,608)	23.3% (n = 1,208)	22.1% (n = 759)
Behavior Toward Others	72.2% (n = 4,092)	59.5% (n = 2,671)	57.1% (n = 2,121)	53.6% (n = 1,609)	52.7% (n = 1,210)	49.9% (n = 759)
Mood and Emotions	63.1% (n = 4,091)	52.0% (n = 2,669)	49.5% (n = 2,119)	48.3% (n = 1,609)	40.8% (n = 1,212)	44.2% (n = 756)
Harmful Behavior	24.8% (n = 4,089)	16.5% (n = 2,670)	13.3% (n = 2,120)	12.0% (n = 1,610)	11.5% (n = 1,211)	11.5% (n = 758)
Substance Abuse	14.5% (n = 4,087)	11.2% (n = 2,670)	11.4% (n = 2,121)	11.4% (n = 1,606)	10.3% (n = 1,209)	10.7% (n = 758)
Thinking	17.1% (n = 4,089)	14.6% (n = 2,666)	12.6% (n = 2,119)	11.1% (n = 1,608)	10.6% (n = 1,210)	11.3% (n = 759)

<sup>a</sup> For Home Role to Thinking scales, the percentages represented those with moderate or severe level of functional impairment.

Grant Communities Funded in 1997–98						
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)
<b>Behavioral and Emotional Rating Scale (BERS)</b>						
Intrapersonal Strengths	8.6 (3.0) (n = 3,688)	9.1 (3.0) (n = 2,544)	9.3 (3.0) (n = 2,040)	9.3 (3.0) (n = 1,642)	9.6 (3.1) (n = 1,223)	9.5 (3.0) (n = 786)
Interpersonal Strengths	7.2 (2.8) (n = 3,685)	7.7 (2.8) (n = 2,545)	8.0 (2.9) (n = 2,040)	8.1 (2.9) (n = 1,643)	8.4 (2.9) (n = 1,224)	8.3 (2.9) (n = 787)
School Functioning	7.2 (2.8) (n = 3,456)	7.7 (2.7) (n = 2,399)	7.8 (2.8) (n = 1,918)	8.0 (2.8) (n = 1,497)	8.0 (2.9) (n = 1,084)	8.0 (2.9) (n = 673)
Family Involvement	8.2 (2.8) (n = 3,642)	8.6 (2.9) (n = 2,510)	8.8 (2.8) (n = 2,002)	8.8 (2.9) (n = 1,609)	9.0 (2.8) (n = 1,197)	9.0 (2.9) (n = 774)
Affective Strengths	9.5 (3.4) (n = 3,687)	9.9 (3.4) (n = 2,543)	9.9 (3.3) (n = 2,041)	10.0 (3.3) (n = 1,642)	10.3 (3.3) (n = 1,224)	10.1 (3.4) (n = 788)
<b>Strengths Quotient</b>	<b>86.2 (16.7)</b> <b>(n = 3,696)</b>	<b>89.5 (17.1)</b> <b>(n = 2,549)</b>	<b>90.4 (17.0)</b> <b>(n = 2,046)</b>	<b>90.6 (17.4)</b> <b>(n = 1,645)</b>	<b>91.7 (17.6)</b> <b>(n = 1,225)</b>	<b>91.0 (17.6)</b> <b>(n = 789)</b>
<b>Family Functioning Scale (FAD)–Caregiver</b>						
Problem Solving	2.8 (0.4) (n = 3,075)	2.9 (0.4) (n = 2,147)	2.9 (0.4) (n = 1,707)	2.9 (0.4) (n = 1,354)	2.9 (0.4) (n = 984)	2.9 (0.4) (n = 610)
Communication	2.8 (0.4) (n = 3,070)	2.9 (0.4) (n = 2,144)	2.9 (0.4) (n = 1,709)	2.9 (0.4) (n = 1,355)	2.9 (0.4) (n = 984)	2.9 (0.4) (n = 608)
Roles	2.5 (0.4) (n = 3,074)	2.6 (0.4) (n = 2,143)	2.6 (0.4) (n = 1,710)	2.6 (0.4) (n = 1,355)	2.6 (0.4) (n = 984)	2.6 (0.4) (n = 609)
Affective Responsiveness	2.9 (0.5) (n = 3,073)	3.0 (0.5) (n = 2,143)	3.0 (0.5) (n = 1,710)	3.0 (0.5) (n = 1,355)	3.0 (0.5) (n = 985)	3.0 (0.5) (n = 608)
Affective Involvement	2.7 (0.5) (n = 3,071)	2.8 (0.5) (n = 2,138)	2.8 (0.4) (n = 1,710)	2.8 (0.5) (n = 1,352)	2.8 (0.5) (n = 985)	2.8 (0.5) (n = 611)
Behavior Control	3.2 (0.4) (n = 3,073)	3.2 (0.4) (n = 2,143)	3.2 (0.4) (n = 1,709)	3.2 (0.4) (n = 1,353)	3.3 (0.4) (n = 985)	3.2 (0.4) (n = 609)
<b>General Functioning</b>	<b>2.9 (0.5)</b> <b>(n = 3,645)</b>	<b>3.0 (0.4)</b> <b>(n = 2,518)</b>	<b>3.0 (0.4)</b> <b>(n = 1,998)</b>	<b>3.0 (0.4)</b> <b>(n = 1,580)</b>	<b>3.0 (0.4)</b> <b>(n = 1,165)</b>	<b>3.0 (0.4)</b> <b>(n = 753)</b>
<b>Family Functioning Scale (FAD)–Youth</b>						
Problem Solving	2.7 (0.4) (n = 1,866)	2.7 (0.4) (n = 1,268)	2.7 (0.4) (n = 1,043)	2.8 (0.4) (n = 851)	2.8 (0.5) (n = 637)	2.8 (0.4) (n = 409)
Communication	2.6 (0.4) (n = 1,863)	2.7 (0.4) (n = 1,270)	2.7 (0.4) (n = 1,038)	2.7 (0.4) (n = 850)	2.7 (0.4) (n = 639)	2.8 (0.4) (n = 412)
Roles	2.6 (0.4) (n = 1,874)	2.6 (0.4) (n = 1,275)	2.7 (0.4) (n = 1,047)	2.7 (0.4) (n = 853)	2.7 (0.4) (n = 639)	2.7 (0.3) (n = 414)
Affective Responsiveness	2.6 (0.5) (n = 1,862)	2.7 (0.4) (n = 1,271)	2.7 (0.4) (n = 1,038)	2.7 (0.4) (n = 849)	2.7 (0.4) (n = 640)	2.7 (0.4) (n = 413)
Affective Involvement	2.6 (0.5) (n = 1,863)	2.6 (0.5) (n = 1,264)	2.6 (0.5) (n = 1,035)	2.7 (0.5) (n = 844)	2.7 (0.5) (n = 637)	2.7 (0.5) (n = 408)
Behavior Control	3.0 (0.4) (n = 1,875)	3.1 (0.4) (n = 1,282)	3.1 (0.4) (n = 1,046)	3.1 (0.4) (n = 853)	3.1 (0.4) (n = 642)	3.1 (0.4) (n = 411)
<b>General Functioning</b>	<b>2.8 (0.5)</b> <b>(n = 2,214)</b>	<b>2.8 (0.4)</b> <b>(n = 1,499)</b>	<b>2.8 (0.4)</b> <b>(n = 1,227)</b>	<b>2.8 (0.4)</b> <b>(n = 978)</b>	<b>2.9 (0.4)</b> <b>(n = 745)</b>	<b>2.9 (0.4)</b> <b>(n = 496)</b>

Grant Communities Funded in 1997–98						
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)
<b>Caregiver Strain Questionnaire (CGSQ)</b>						
Subjective Externalizing Strain	2.4 (1.0) (n = 4,028)	2.2 (0.9) (n = 2,727)	2.1 (0.9) (n = 2,160)	2.1 (0.9) (n = 1,681)	2.1 (0.9) (n = 1,232)	2.0 (0.9) (n = 784)
Subjective Internalizing Strain	3.6 (1.0) (n = 4,020)	3.3 (1.0) (n = 2,717)	3.1 (1.1) (n = 2,155)	3.0 (1.1) (n = 1,679)	2.9 (1.1) (n = 1,230)	2.8 (1.1) (n = 784)
Objective Strain	2.7 (1.1) (n = 4,029)	2.4 (1.0) (n = 2,726)	2.3 (1.0) (n = 2,160)	2.2 (1.0) (n = 1,680)	2.1 (1.0) (n = 1,231)	2.1 (1.0) (n = 782)
<b>Global Strain</b>	<b>2.9 (0.9)</b> <b>(n = 4,029)</b>	<b>2.6 (0.9)</b> <b>(n = 2,729)</b>	<b>2.5 (0.9)</b> <b>(n = 2,163)</b>	<b>2.4 (0.9)</b> <b>(n = 1,681)</b>	<b>2.4 (0.9)</b> <b>(n = 1,232)</b>	<b>2.3 (0.9)</b> <b>(n = 783)</b>
<b>Family Resources</b>						
Basic Needs	4.4 (0.6) (n = 4,056)	4.4 (0.6) (n = 2,733)	4.4 (0.6) (n = 2,154)	4.5 (0.6) (n = 1,678)	4.5 (0.6) (n = 1,235)	4.5 (0.6) (n = 783)
Quality of Life	4.2 (0.9) (n = 3,724)	4.2 (0.8) (n = 2,486)	4.2 (0.8) (n = 1,953)	4.2 (0.8) (n = 1,512)	4.2 (0.8) (n = 1,112)	4.3 (0.8) (n = 681)
Cash and Recreation	3.0 (1.0) (n = 3,992)	3.1 (1.0) (n = 2,686)	3.1 (1.0) (n = 2,123)	3.1 (1.0) (n = 1,640)	3.1 (1.0) (n = 1,196)	3.1 (1.0) (n = 767)
Time	3.3 (0.9) (n = 4,025)	3.4 (0.9) (n = 2,719)	3.4 (0.9) (n = 2,149)	3.5 (0.9) (n = 1,668)	3.5 (0.9) (n = 1,231)	3.5 (0.9) (n = 778)
Health and Social Services	4.0 (1.1) (n = 3,339)	4.1 (1.0) (n = 2,242)	4.1 (1.0) (n = 1,724)	4.1 (1.0) (n = 1,314)	4.1 (1.0) (n = 960)	4.1 (1.0) (n = 619)
Childcare	3.1 (1.5) (n = 2,504)	3.1 (1.5) (n = 1,542)	3.2 (1.5) (n = 1,126)	3.1 (1.5) (n = 791)	3.1 (1.5) (n = 577)	3.2 (1.5) (n = 365)

Grant Communities Funded in 1997–98						
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b>Restrictiveness of Living Environments and Placement Stability Scale–Revised Version (ROLES–R)</b>						
<b><u>Living Arrangement</u></b>	(n = 4,361)	(n = 2,892)	(n = 2,291)	(n = 1,773)	(n = 1,327)	(n = 827)
No Place to Stay	0.3%	0.5%	0.3%	0.2%	0.4%	0.5%
Independent Living by Self	0.0%	0.2%	0.3%	0.5%	0.5%	1.3%
Independent Living with Partner–Friend	0.2%	0.2%	0.5%	0.6%	1.1%	1.1%
Two Parents/Caregivers, At Least One Biological Parent	34.3%	34.5%	31.6%	32.3%	31.2%	29.4%
Biological Mother Only	33.3%	30.2%	32.5%	31.8%	32.1%	32.2%
Biological Father Only	2.6%	2.7%	2.9%	3.0%	3.5%	2.1%
Split Parenting	0.6%	0.4%	0.3%	0.4%	0.4%	0.5%
School Dormitory	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%
Home of a Relative	9.5%	9.0%	8.6%	8.2%	8.7%	8.6%
Adoptive Home	3.3%	4.0%	4.6%	4.4%	4.6%	4.7%
Home of a Friend	0.4%	0.7%	0.4%	0.7%	1.0%	0.6%
Camp	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Supervised Independent Living	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%
Foster Care	3.7%	3.6%	3.5%	3.6%	3.1%	3.1%
Specialized Foster Care	0.3%	0.3%	0.2%	0.4%	0.4%	0.5%
Therapeutic Foster Care	1.1%	1.1%	1.1%	1.0%	1.0%	1.5%
Individual Home Emergency Shelter	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%
Group Emergency Shelter	0.4%	0.4%	0.2%	0.2%	0.2%	0.4%
Group Home	2.5%	3.3%	3.8%	2.9%	3.8%	4.2%
Residential Job Corp–Vocational Center	0.0%	0.0%	0.3%	0.2%	0.5%	0.2%
Residential Treatment Center (non-drug/alcohol)	1.7%	2.8%	2.8%	3.0%	2.5%	3.0%
Drug/Alcohol Residential Treatment Center	0.3%	0.2%	0.3%	0.4%	0.2%	0.2%
Medical Hospital (non-psychiatric)	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%
Psychiatric Hospital	1.0%	0.7%	1.0%	0.8%	0.8%	0.2%
Juvenile Detention Center	2.9%	3.5%	3.4%	3.8%	3.1%	3.5%
Jail/Prison	0.1%	0.1%	0.3%	0.2%	0.2%	0.7%
Other	0.9%	1.0%	0.7%	1.1%	0.5%	1.1%
<b><u>Children with One or More Living Arrangements in Past 6 Months</u></b>	(n = 4,363)	(n = 2,893)	(n = 2,292)	(n = 1,776)	(n = 1,329)	(n = 827)
One	63.4%	70.5%	74.3%	76.4%	77.1%	78.4%
Two or More	36.6%	29.5%	25.7%	23.6%	22.9%	21.6%
<b>Education Questionnaire (EQ)</b>						
<b><u>School Performance Last 6 Months</u></b>	(n = 3,605)	(n = 2,426)	(n = 1,980)	(n = 1,468)	(n = 1,107)	(n = 680)
Grade Average A	6.7%	7.8%	8.1%	7.6%	8.0%	8.8%
Grade Average B	18.5%	22.8%	24.0%	26.8%	27.6%	27.4%
Grade Average C	26.4%	29.2%	31.8%	31.5%	31.9%	33.7%
Grade Average D	13.0%	10.6%	10.7%	9.7%	9.2%	10.1%
Failing All or Most Classes	24.9%	18.1%	16.0%	14.2%	12.7%	12.1%
School Does Not Grade	9.2%	9.8%	8.3%	9.0%	8.8%	6.9%
Other	1.3%	1.6%	1.1%	1.2%	1.7%	0.7%

Grant Communities Funded in 1997–98						
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b><u>Caregiver Perception: Do Child's Grades Match Ability or Could Child Do Better?</u></b>	(n = 3,397)	(n = 2,355)	(n = 1,954)	(n = 1,450)	(n = 1,094)	(n = 672)
Matches Ability	21.5%	29.0%	29.4%	29.2%	32.7%	32.9%
Could Do Better	78.5%	71.0%	70.6%	70.8%	67.3%	67.1%
<b><u>Child Had Individualized Education Plan in Last 6 Months</u></b>	(n = 3,772)	(n = 2,504)	(n = 2,019)	(n = 1,492)	(n = 1,118)	(n = 673)
Had IEP	52.6%	58.5%	62.8%	61.9%	62.2%	64.0%
Did Not Have IEP	47.4%	41.5%	37.2%	38.1%	37.8%	36.0%
<b><u>Reasons for IEP</u></b>	(n = 1,912)	(n = 1,431)	(n = 1,251)	(n = 910)	(n = 669)	(n = 428)
Behavioral/Emotional Problems	72.6%	76.9%	77.1%	77.3%	78.6%	78.0%
Learning Disability	47.9%	50.2%	54.8%	54.5%	54.3%	58.4%
Physical Disability	2.8%	2.4%	2.0%	1.4%	2.5%	2.3%
Developmental Disability/Mental Retardation	9.4%	10.8%	9.0%	11.2%	13.3%	14.3%
Vision or Hearing Impairment	2.6%	2.1%	2.5%	1.6%	3.6%	2.3%
Speech Impairment	8.8%	7.8%	8.1%	9.8%	8.4%	7.9%
Other Reason	6.2%	5.4%	5.4%	6.5%	3.6%	6.1%
<b><u>School Attendance in Last 6 Months</u></b>	(n = 3,073)	(n = 1,987)	(n = 1,540)	(n = 1,105)	(n = 828)	(n = 484)
Attended Regularly	66.9%	76.2%	76.4%	77.0%	79.2%	79.1%
Attended More Often than Not	17.9%	13.9%	14.1%	14.1%	12.4%	13.6%
Attended Infrequently	15.2%	9.9%	9.5%	8.9%	8.3%	7.2%
<b><u>Special Education</u></b>						
Child Took Classes Where Everyone Attending Was in Special Education	37.1%	41.3%	44.5%	47.1%	45.1%	43.6%
	(n = 2,625)	(n = 2,014)	(n = 1,785)	(n = 1,370)	(n = 1,056)	(n = 663)
Child Took Classes Where Some Attending Were in Special Education, Others Not	30.3%	32.2%	32.5%	30.4%	30.6%	34.0%
	(n = 2,561)	(n = 1,972)	(n = 1,751)	(n = 1,343)	(n = 1,040)	(n = 652)
<b><u>Percent of Day Spent in Special Education Classes</u></b>	(n = 2,413)	(n = 1,871)	(n = 1,694)	(n = 1,308)	(n = 991)	(n = 625)
0–25%	60.7%	55.3%	54.0%	53.3%	54.1%	54.9%
26–50%	9.0%	9.6%	8.1%	8.6%	10.4%	10.2%
51–75%	6.7%	7.1%	7.2%	6.2%	8.3%	6.7%
76–100%	22.6%	26.8%	29.1%	30.9%	25.9%	26.7%
Other	1.1%	1.2%	1.5%	1.1%	1.3%	1.4%
<b><u>School Performance Last 6 Months: Grades 1 Through 6</u></b>	(n = 1,399)	(n = 912)	(n = 673)	(n = 449)	(n = 336)	(n = 194)
Grade Average A	8.6%	9.3%	8.8%	10.0%	9.2%	10.8%
Grade Average B	19.0%	21.5%	24.1%	24.1%	23.8%	28.4%
Grade Average C	26.5%	26.9%	30.3%	26.1%	29.8%	31.4%
Grade Average D	12.1%	9.6%	10.4%	9.6%	7.1%	6.2%
Failing All or Most Classes	15.9%	11.6%	7.9%	9.4%	8.0%	5.2%
School Does Not Grade	16.7%	19.5%	17.7%	19.8%	19.3%	16.5%
Other	1.2%	1.5%	0.9%	1.1%	2.4%	1.5%

Grant Communities Funded in 1997–98						
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b><u>School Performance Last 6 Months: Grades 7 and 8</u></b>	(n = 878)	(n = 538)	(n = 431)	(n = 314)	(n = 224)	(n = 153)
Grade Average A	3.8%	4.3%	6.0%	5.4%	4.0%	7.8%
Grade Average B	16.2%	25.1%	21.6%	25.8%	25.0%	28.1%
Grade Average C	30.5%	34.8%	33.4%	37.6%	35.3%	28.8%
Grade Average D	14.9%	10.4%	13.9%	12.4%	9.8%	16.3%
Failing All or Most Classes	32.2%	21.7%	21.3%	14.0%	18.8%	14.4%
School Does Not Grade	1.6%	3.0%	2.3%	3.5%	4.5%	4.6%
Other	0.8%	0.7%	1.4%	1.0%	1.8%	0.0%
<b><u>School Performance Last 6 Months: Grades 9 Through 12</u></b>	(n = 1,017)	(n = 770)	(n = 723)	(n = 577)	(n = 452)	(n = 275)
Grade Average A	6.7%	8.1%	8.3%	6.9%	7.3%	8.4%
Grade Average B	20.0%	22.3%	25.9%	30.8%	32.7%	26.5%
Grade Average C	25.8%	30.9%	34.2%	33.8%	32.3%	38.5%
Grade Average D	14.5%	13.1%	9.7%	8.0%	10.2%	9.1%
Failing All or Most Classes	31.1%	22.2%	18.9%	17.2%	13.9%	14.9%
School Does Not Grade	1.4%	1.6%	2.5%	2.6%	3.1%	2.2%
Other	0.7%	1.8%	0.6%	0.7%	0.4%	0.0%
<b><u>Type of Educational Placements<sup>b</sup></u></b>	(n = 3,738)	(n = 2,505)	(n = 2,053)	(n = 1,514)	(n = 1,105)	(n = 696)
Regular Public Day School	80.6%	78.4%	75.6%	76.2%	75.0%	74.7%
Regular Private or Boarding School	2.1%	1.8%	1.7%	1.8%	1.9%	1.6%
Home Schooling	2.1%	1.5%	1.5%	1.4%	1.0%	0.9%
Home-based Instruction	1.8%	1.5%	1.4%	1.2%	1.0%	1.3%
Combination Home Schooling/Home-based Instruction	1.3%	0.8%	0.7%	0.5%	0.3%	0.3%
Alternative/Special Day School	19.6%	18.9%	20.3%	19.0%	19.1%	15.5%
School in 24-Hour Hospital Setting	4.5%	2.3%	1.8%	1.5%	1.5%	1.0%
School in 24-Hour Juvenile Justice Facility	3.9%	3.6%	4.1%	3.9%	3.7%	3.9%
School in 24-Hour Residential Treatment Center	4.1%	4.4%	5.1%	4.6%	4.6%	4.5%
Other	6.7%	5.6%	5.0%	4.0%	3.8%	4.9%
<sup>b</sup> Because an individual may have more than one educational placement, the educational placement variable may add to more than 100%.						
<b><u>Disciplinary Actions in Past 6 Months</u></b>						
Detention	35.6%	30.7%	26.9%	24.2%	24.3%	20.6%
	(n = 3,728)	(n = 2,313)	(n = 1,841)	(n = 1,359)	(n = 1,013)	(n = 620)
Suspension	43.2%	34.7%	32.9%	28.9%	29.4%	24.5%
	(n = 3,801)	(n = 2,342)	(n = 1,864)	(n = 1,382)	(n = 1,022)	(n = 632)
Expulsion	7.6%	5.5%	4.6%	4.7%	4.2%	3.0%
	(n = 3,755)	(n = 2,331)	(n = 1,857)	(n = 1,368)	(n = 1,017)	(n = 627)

Grant Communities Funded in 1997–98

	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b>Delinquency Survey (DS)</b>						
<b><u>Juvenile Delinquency in Past 6 Months</u></b>						
Accused of Breaking the Law	36.1% (n = 2,361)	28.6% (n = 1,622)	26.6% (n = 1,344)	25.4% (n = 1,073)	22.0% (n = 824)	18.0% (n = 532)
Arrested	29.7% (n = 2,397)	20.2% (n = 1,635)	18.6% (n = 1,353)	16.7% (n = 1,081)	14.6% (n = 827)	13.3% (n = 532)
Convicted of a Crime	21.9% (n = 2,390)	16.6% (n = 1,622)	14.6% (n = 1,347)	14.1% (n = 1,073)	12.3% (n = 824)	13.4% (n = 529)
On Probation	34.1% (n = 2,388)	33.7% (n = 1,636)	32.1% (n = 1,356)	27.1% (n = 1,709)	22.6% (n = 826)	21.6% (n = 532)
In Detention Center/Jail	27.8% (n = 2,367)	20.6% (n = 1,608)	17.8% (n = 1,346)	17.8% (n = 1,076)	17.5% (n = 817)	14.1% (n = 532)

Grant Communities Funded in 1997–98						
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b>Substance Use Survey A (SUS–A)</b>						
<b><u>Have You Ever Used:</u></b>						
Cigarettes	62.8% (n = 2,463)	61.6% (n = 1,656)	63.7% (n = 1,372)	63.8% (n = 1,091)	63.8% (n = 828)	61.1% (n = 535)
Alcohol	56.6% (n = 2,463)	56.3% (n = 1,665)	58.2% (n = 1,374)	61.2% (n = 1,097)	64.7% (n = 829)	64.1% (n = 535)
Marijuana/Hashish	47.1% (n = 2,454)	44.3% (n = 1,662)	49.3% (n = 1,371)	51.0% (n = 1,095)	52.4% (n = 827)	52.7% (n = 533)
Cocaine in a Powder Form	8.1% (n = 2,455)	8.5% (n = 1,655)	9.7% (n = 1,372)	11.6% (n = 1,092)	11.7% (n = 827)	10.7% (n = 533)
LSD, Acid, PCP or Other Psychedelics	12.0% (n = 2,453)	11.3% (n = 1,657)	12.5% (n = 1,371)	13.8% (n = 1,091)	14.1% (n = 827)	14.1% (n = 533)
Non-Prescription or Over-the-Counter Drugs	10.6% (n = 2,453)	8.7% (n = 1,646)	9.2% (n = 1,367)	8.3% (n = 1,089)	8.5% (n = 825)	8.3% (n = 531)
Quaaludes (e.g., quads)	1.1% (n = 2,457)	1.1% (n = 1,652)	1.1% (n = 1,370)	1.7% (n = 1,092)	1.3% (n = 825)	1.1% (n = 532)
Heroin, Smack	2.6% (n = 2,455)	3.3% (n = 1,654)	2.7% (n = 1,372)	4.1% (n = 1,091)	4.1% (n = 827)	4.3% (n = 533)
Barbituates (e.g., downers)	3.5% (n = 2,457)	3.9% (n = 1,652)	4.4% (n = 1,372)	5.8% (n = 1,092)	5.7% (n = 825)	4.3% (n = 531)
Narcotics (e.g., morphine)	7.1% (n = 2,457)	6.8% (n = 1,652)	7.4% (n = 1,372)	7.1% (n = 1,092)	7.3% (n = 827)	6.4% (n = 533)
Crack or Rock in a Hard Chunk Form	4.3% (n = 2,456)	4.0% (n = 1,655)	4.6% (n = 1,372)	5.5% (n = 1,092)	5.6% (n = 827)	4.7% (n = 533)
Amphetamines	7.7% (n = 2,457)	8.7% (n = 1,653)	8.8% (n = 1,372)	8.9% (n = 1,090)	9.2% (n = 826)	9.2% (n = 533)
Tranquilizers (e.g., Valium)	4.8% (n = 2,457)	4.7% (n = 1,654)	5.2% (n = 1,372)	6.6% (n = 1,091)	5.7% (n = 825)	7.1% (n = 532)
Inhalants (e.g., spray cans)	9.7% (n = 2,455)	8.6% (n = 1,657)	8.5% (n = 1,372)	8.0% (n = 1,091)	9.8% (n = 825)	7.9% (n = 533)
<b><u>Substance Use in Last 6 Months</u></b>						
Cigarettes	43.9% (n = 2,428)	40.3% (n = 1,641)	40.9% (n = 1,353)	43.1% (n = 1,071)	43.0% (n = 811)	41.9% (n = 516)
Alcohol	36.2% (n = 2,424)	29.7% (n = 1,639)	29.9% (n = 1,347)	33.4% (n = 1,069)	34.4% (n = 812)	37.2% (n = 516)
Marijuana/Hashish	28.1% (n = 2,407)	20.6% (n = 1,630)	22.7% (n = 1,350)	22.9% (n = 1,067)	24.0% (n = 807)	24.2% (n = 516)

Grant Communities Funded in 1997–98						
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b>Multi-Sector Service Contacts (MSSC)</b>						
<b><u>Traditional Services Received in Last 6 Months</u></b>						
Individual Therapy	n/a	75.1% (n = 2,578)	70.4% (n = 1,901)	68.5% (n = 1,376)	66.8% (n = 925)	66.1% (n = 552)
Case Management	n/a	73.7% (n = 2,570)	68.5% (n = 1,905)	64.2% (n = 1,373)	61.1% (n = 927)	57.2% (n = 556)
Assessment or Evaluation	n/a	63.3% (n = 2,562)	54.7% (n = 1,872)	53.0% (n = 1,350)	46.2% (n = 914)	49.2% (n = 547)
Medication Treatment/Monitoring	n/a	58.0% (n = 2,580)	56.9% (n = 1,901)	59.9% (n = 1,374)	58.8% (n = 930)	60.0% (n = 553)
Family Therapy	n/a	37.2% (n = 2,575)	31.3% (n = 1,901)	29.6% (n = 1,370)	25.5% (n = 923)	28.7% (n = 558)
Group Therapy	n/a	30.1% (n = 2,566)	30.9% (n = 1,893)	29.5% (n = 1,364)	29.0% (n = 926)	30.6% (n = 553)
Crisis Stabilization	n/a	19.6% (n = 2,563)	15.7% (n = 1,885)	13.5% (n = 1,359)	13.2% (n = 918)	13.2% (n = 553)
<b><u>Innovative Services Received in Last 6 Months</u></b>						
Recreational Activities	n/a	32.7% (n = 2,569)	31.4% (n = 1,901)	30.7% (n = 1,371)	27.8% (n = 929)	30.6% (n = 556)
Family Support	n/a	31.5% (n = 2,568)	29.5% (n = 1,896)	27.6% (n = 1,362)	27.2% (n = 925)	27.1% (n = 568)
Transportation	n/a	20.8% (n = 2,566)	19.5% (n = 1,901)	19.7% (n = 1,370)	17.8% (n = 926)	18.8% (n = 554)
Flexible Funds	n/a	21.2% (n = 2,537)	18.8% (n = 1,891)	16.6% (n = 1,362)	13.8% (n = 926)	11.9% (n = 556)
Behavioral/Therapeutic Aide	n/a	18.5% (n = 2,571)	18.0% (n = 1,895)	15.8% (n = 1,371)	14.2% (n = 929)	15.1% (n = 557)
Family Preservation	n/a	10.3% (n = 2,550)	11.9% (n = 1,883)	7.9% (n = 1,360)	7.5% (n = 919)	6.5% (n = 553)
Respite	n/a	13.4% (n = 2,558)	9.7% (n = 1,890)	9.1% (n = 1,360)	10.4% (n = 927)	8.3% (n = 553)
Transition	n/a	2.0% (n = 2,535)	1.8% (n = 1,881)	2.0% (n = 1,360)	1.3% (n = 924)	2.0% (n = 551)
Independent Living	n/a	2.7% (n = 2,536)	3.2% (n = 1,880)	4.3% (n = 1,361)	3.8% (n = 924)	4.5% (n = 553)
Afterschool Programs	n/a	14.6% (n = 2,098)	12.2% (n = 1,639)	12.1% (n = 1,215)	10.4% (n = 850)	9.3% (n = 535)

Grant Communities Funded in 1997–98

	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b><u>Restrictive Services Received in Last 6 Months</u></b>						
Day Treatment	n/a	10.5% (n = 2,572)	9.4% (n = 1,900)	8.0% (n = 1,372)	6.4% (n = 929)	8.1% (n = 558)
Inpatient Hospitalization	n/a	8.7% (n = 2,569)	7.6% (n = 1,902)	7.4% (n = 1,373)	7.6% (n = 930)	9.1% (n = 558)
Residential Treatment Center	n/a	7.6% (n = 2,576)	7.9% (n = 1,901)	8.7% (n = 1,372)	9.7% (n = 927)	10.8% (n = 556)
Therapeutic Group Home	n/a	6.3% (n = 2,573)	6.9% (n = 1,900)	6.5% (n = 1,372)	7.5% (n = 931)	9.1% (n = 558)
Therapeutic Foster Care	n/a	4.1% (n = 2,577)	4.5% (n = 1,902)	3.0% (n = 1,374)	4.4% (n = 929)	5.5% (n = 559)
Residential Camp	n/a	2.8% (n = 2,576)	2.3% (n = 1,904)	3.4% (n = 1,374)	1.5% (n = 930)	2.0% (n = 558)
<b>Average Number of Service Types Received in Last 6 Months</b>	<b>n/a</b>	<b>5.6</b> <b>(n = 2,596)</b>	<b>5.2</b> <b>(n = 1,913)</b>	<b>5.0</b> <b>(n = 1,382)</b>	<b>4.7</b> <b>(n = 935)</b>	<b>4.9</b> <b>(n = 560)</b>

Table C-3 (Part 2). Child and Family Outcomes at Intake, 6 Months, 12 Months, 18 Months, 24 Months, and 30 Months

Grant Communities Funded in 1999–2000						
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)
<b>Child Behavior Checklist (CBCL)</b>						
Activities Competence	39.3 (9.1) (n = 2,123)	39.3 (8.7) (n = 1,352)	39.0 (8.9) (n = 962)	39.2 (8.7) (n = 611)	39.5 (8.3) (n = 343)	39.7 (8.4) (n = 197)
Social Competence	35.7 (10.4) (n = 2,250)	36.6 (10.2) (n = 1,431)	37.0 (10.1) (n = 1,012)	37.3 (10.1) (n = 644)	38.1 (9.6) (n = 362)	36.5 (10.1) (n = 203)
School Competence	32.8 (9.4) (n = 2,324)	34.2 (9.5) (n = 1,490)	34.8 (9.7) (n = 1,058)	35.2 (10.1) (n = 664)	35.2 (10.3) (n = 384)	34.9 (10.0) (n = 213)
Internalizing Problems	65.0 (11.4) (n = 2,370)	62.6 (11.8) (n = 1,500)	61.2 (12.2) (n = 1,050)	60.8 (12.3) (n = 665)	60.3 (11.7) (n = 384)	61.0 (11.7) (n = 212)
Externalizing Problems	69.8 (10.7) (n = 2,370)	66.9 (11.1) (n = 1,500)	66.1 (11.5) (n = 1,050)	65.0 (11.6) (n = 665)	64.0 (11.8) (n = 384)	64.3 (11.1) (n = 212)
<b>Total Problems</b>	<b>70.8 (10.3)</b> <b>(n = 2,366)</b>	<b>67.8 (11.1)</b> <b>(n = 1,494)</b>	<b>66.7 (11.6)</b> <b>(n = 1,047)</b>	<b>66.0 (11.6)</b> <b>(n = 663)</b>	<b>65.2 (11.4)</b> <b>(n = 381)</b>	<b>65.9 (10.9)</b> <b>(n = 208)</b>
<b>Child and Adolescent Functional Assessment Scale (CAFAS)</b>						
Mean Total Scale Score	119.3 (47.9) (n = 2,712)	102.8 (50.1) (n = 1,551)	99.7 (50.1) (n = 1,048)	94.6 (50.5) (n = 697)	92.6 (51.0) (n = 398)	85.6 (50.9) (n = 221)
Home Role <sup>a</sup>	75.8% (n = 2,713)	67.2% (n = 1,555)	66.6% (n = 1,046)	59.7% (n = 693)	60.2% (n = 397)	57.7% (n = 220)
School Role	83.4% (n = 2,697)	73.2% (n = 1,552)	73.5% (n = 1,056)	69.4% (n = 697)	66.8% (n = 395)	64.2% (n = 218)
Community Role	39.7% (n = 2,714)	28.7% (n = 1,557)	25.4% (n = 1,050)	22.8% (n = 698)	20.6% (n = 398)	19.9% (n = 221)
Behavior Toward Others	79.1% (n = 2,717)	71.2% (n = 1,560)	70.4% (n = 1,051)	65.2% (n = 698)	63.9% (n = 399)	57.9% (n = 221)
Mood and Emotions	74.4% (n = 2,716)	67.8% (n = 1,557)	65.0% (n = 1,050)	61.0% (n = 697)	60.2% (n = 399)	55.7% (n = 221)
Harmful Behavior	31.4% (n = 2,719)	22.2% (n = 1,557)	19.0% (n = 1,053)	17.7% (n = 700)	15.6% (n = 398)	12.7% (n = 221)
Substance Abuse	8.5% (n = 2,704)	5.8% (n = 1,552)	5.0% (n = 1,050)	4.3% (n = 699)	5.8% (n = 399)	4.5% (n = 220)
Thinking	32.2% (n = 2,710)	28.4% (n = 1,557)	25.0% (n = 1,050)	24.1% (n = 697)	27.3% (n = 399)	19.0% (n = 221)
<sup>a</sup> For Home Role to Thinking scales, the percentages represented those with moderate or severe level of functional impairment.						

Grant Communities Funded in 1999–2000						
	Intake Mean (SD)	6 Months Mean (SD)	12 Months Mean (SD)	18 Months Mean (SD)	24 Months Mean (SD)	30 Months Mean (SD)
<b>Behavioral and Emotional Rating Scale (BERS)</b>						
Intrapersonal Strengths	8.6 (3.2) (n = 2,839)	8.9 (3.1) (n = 1,614)	9.1 (3.1) (n = 1,122)	9.1 (3.1) (n = 717)	9.3 (3.1) (n = 407)	9.0 (2.9) (n = 233)
Interpersonal Strengths	7.3 (2.9) (n = 2,845)	7.7 (2.9) (n = 1,617)	7.9 (2.8) (n = 1,121)	7.9 (2.7) (n = 717)	8.1 (2.8) (n = 408)	8.2 (2.7) (n = 233)
School Functioning	7.5 (2.9) (n = 2,633)	8.0 (2.9) (n = 1,486)	8.2 (2.9) (n = 1,041)	8.2 (2.8) (n = 667)	8.3 (2.8) (n = 375)	8.2 (2.8) (n = 212)
Family Involvement	8.6 (2.9) (n = 2,796)	8.9 (2.9) (n = 1,579)	9.0 (2.8) (n = 1,098)	9.0 (2.8) (n = 701)	9.2 (2.9) (n = 402)	9.0 (2.8) (n = 229)
Affective Strengths	9.7 (3.5) (n = 2,847)	9.9 (3.4) (n = 1,616)	10.0 (3.4) (n = 1,125)	10.0 (3.4) (n = 713)	10.2 (3.4) (n = 409)	10.0 (3.2) (n = 233)
<b>Strengths Quotient</b>	<b>87.2 (17.4)</b> (n = 2,855)	<b>89.8 (17.5)</b> (n = 1,618)	<b>90.6 (17.5)</b> (n = 1,126)	<b>91.0 (17.3)</b> (n = 717)	<b>91.7 (17.8)</b> (n = 410)	<b>90.9 (16.4)</b> (n = 233)
<b>Family Functioning Scale (FAD)–Caregiver</b>						
<b>General Functioning<sup>b</sup></b>	<b>2.9 (0.5)</b> (n = 2,779)	<b>2.9 (0.5)</b> (n = 1,564)	<b>3.0 (0.5)</b> (n = 1,089)	<b>3.0 (0.5)</b> (n = 684)	<b>3.0 (0.5)</b> (n = 395)	<b>3.0 (0.5)</b> (n = 221)
<b>Family Functioning Scale (FAD)–Youth</b>						
<b>General Functioning<sup>b</sup></b>	<b>2.8 (0.4)</b> (n = 1,823)	<b>2.8 (0.4)</b> (n = 1,038)	<b>2.8 (0.4)</b> (n = 735)	<b>2.8 (0.4)</b> (n = 475)	<b>2.9 (0.4)</b> (n = 315)	<b>2.8 (0.4)</b> (n = 176)
<sup>b</sup> Only the General Functioning Subscale items were collected for grant communities funded in 1999 and 2000.						
<b>Caregiver Strain Questionnaire (CGSQ)</b>						
Subjective Externalizing Strain	2.4 (1.0) (n = 2,758)	2.2 (1.0) (n = 1,563)	2.1 (0.9) (n = 1,075)	2.0 (0.9) (n = 685)	2.0 (0.9) (n = 394)	2.0 (0.9) (n = 221)
Subjective Internalizing Strain	3.7 (1.0) (n = 2,771)	3.4 (1.0) (n = 1,566)	3.3 (1.1) (n = 1,078)	3.1 (1.1) (n = 687)	3.0 (1.1) (n = 394)	3.0 (1.0) (n = 221)
Objective Strain	2.9 (1.1) (n = 2,764)	2.6 (1.1) (n = 1,565)	2.4 (1.0) (n = 1,074)	2.3 (1.0) (n = 686)	2.2 (1.0) (n = 394)	2.2 (1.0) (n = 221)
<b>Global Strain</b>	<b>3.0 (0.9)</b> (n = 2,759)	<b>2.7 (0.9)</b> (n = 1,559)	<b>2.6 (0.9)</b> (n = 1,074)	<b>2.5 (0.9)</b> (n = 685)	<b>2.4 (0.9)</b> (n = 393)	<b>2.4 (0.9)</b> (n = 221)
<b>Family Resources</b>						
Basic Needs	4.3 (0.7) (n = 2,785)	4.3 (0.7) (n = 1,570)	4.3 (0.8) (n = 1,076)	4.4 (0.7) (n = 686)	4.4 (0.7) (n = 397)	4.4 (0.7) (n = 222)
Quality of Life	4.0 (0.9) (n = 2,527)	4.1 (0.9) (n = 1,388)	4.1 (0.9) (n = 954)	4.1 (0.9) (n = 591)	4.2 (0.8) (n = 339)	4.1 (0.9) (n = 193)
Cash and Recreation	2.8 (1.1) (n = 2,753)	2.9 (1.0) (n = 1,549)	2.9 (1.1) (n = 1,061)	2.9 (1.0) (n = 677)	3.0 (1.1) (n = 387)	2.9 (1.1) (n = 220)
Time	3.2 (0.9) (n = 2,783)	3.2 (0.9) (n = 1,563)	3.3 (0.9) (n = 1,088)	3.3 (0.9) (n = 684)	3.4 (0.9) (n = 395)	3.3 (0.9) (n = 221)
Health and Social Services	3.9 (1.1) (n = 2,332)	3.8 (1.1) (n = 1,304)	4.0 (1.0) (n = 906)	3.9 (1.0) (n = 568)	3.9 (1.1) (n = 330)	3.9 (1.0) (n = 184)
Childcare	2.5 (1.5) (n = 1,800)	2.6 (1.5) (n = 933)	2.6 (1.4) (n = 622)	2.6 (1.4) (n = 380)	2.7 (1.5) (n = 193)	2.8 (1.4) (n = 108)

Grant Communities Funded in 1999–2000

	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b>Restrictiveness of Living Environments and Placement Stability Scale–Revised Version (ROLES–R)</b>						
<b><u>Living Arrangement</u></b>	(n = 2,912)	(n = 1,665)	(n = 1,148)	(n = 724)	(n = 423)	(n = 236)
No Place to Stay	0.1%	0.1%	0.0%	0.3%	0.0%	0.0%
Independent Living by Self	0.0%	0.2%	0.3%	0.1%	0.7%	0.0%
Independent Living with Partner–Friend	0.1%	0.2%	0.6%	0.8%	0.9%	1.3%
Two Parents/Caregivers, At Least One Biological Parent	29.4%	28.8%	29.2%	28.2%	25.8%	30.1%
Biological Mother Only	33.1%	32.0%	31.8%	30.7%	29.1%	28.8%
Biological Father Only	2.7%	2.4%	2.4%	3.3%	2.4%	3.4%
Split Parenting	0.4%	0.3%	0.2%	0.3%	0.5%	0.0%
School Dormitory	0.0%	0.1%	0.3%	0.1%	0.2%	0.4%
Home of a Relative	10.0%	11.8%	10.1%	10.9%	13.5%	14.4%
Adoptive Home	5.3%	5.6%	5.8%	5.4%	6.4%	5.1%
Home of a Friend	0.4%	0.4%	0.3%	0.6%	0.0%	0.0%
Camp	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%
Supervised Independent Living	0.2%	0.1%	0.1%	0.4%	0.0%	0.4%
Foster Care	3.3%	2.9%	2.8%	2.8%	2.6%	1.7%
Specialized Foster Care	0.2%	0.3%	0.3%	0.3%	0.2%	0.4%
Therapeutic Foster Care	1.3%	2.0%	1.8%	1.5%	1.9%	3.4%
Individual Home Emergency Shelter	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%
Group Emergency Shelter	0.7%	0.2%	0.0%	0.1%	0.0%	0.0%
Group Home	2.9%	3.5%	3.0%	2.9%	3.8%	3.0%
Residential Job Corp–Vocational Center	0.0%	0.0%	0.0%	0.1%	0.0%	0.4%
Residential Treatment Center (non-drug/alcohol)	4.5%	4.6%	5.7%	5.0%	6.1%	3.4%
Drug/Alcohol Residential Treatment Center	0.4%	0.5%	0.3%	0.3%	0.0%	0.0%
Medical Hospital (non-psychiatric)	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Psychiatric Hospital	2.0%	1.1%	1.2%	1.2%	1.4%	1.3%
Juvenile Detention Center	1.8%	1.6%	2.5%	3.6%	1.7%	1.3%
Jail/Prison	0.0%	0.4%	0.3%	0.3%	1.2%	0.8%
Other	1.0%	0.6%	0.8%	0.7%	1.7%	0.4%
<b><u>Children with One or More Living Arrangements in Past 6 Months</u></b>						
One	54.9%	65.7%	71.6%	72.8%	76.7%	72.5%
Two or More	45.1%	34.3%	28.4%	27.2%	23.3%	27.5%
<b>Education Questionnaire (EQ)</b>						
<b><u>School Performance Last 6 Months</u></b>	(n = 2,749)	(n = 1,563)	(n = 1,059)	(n = 675)	(n = 377)	(n = 213)
Grade Average A	6.4%	9.0%	9.7%	8.7%	10.1%	10.3%
Grade Average B	22.7%	28.7%	28.3%	29.2%	29.7%	27.2%
Grade Average C	29.0%	29.8%	32.9%	32.6%	34.5%	31.0%
Grade Average D	9.1%	8.3%	7.6%	7.9%	9.3%	10.8%
Failing All or Most Classes	21.0%	14.9%	11.5%	10.8%	8.8%	13.1%
School Does Not Grade	9.2%	7.9%	8.4%	10.4%	6.6%	7.0%
Other	2.6%	1.5%	1.6%	0.4%	1.1%	0.5%

Grant Communities Funded in 1999–2000

	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b><u>Caregiver Perception: Do Child's Grades Match Ability or Could Child Do Better?</u></b>	(n = 2,733)	(n = 1,557)	(n = 1,060)	(n = 682)	(n = 379)	(n = 212)
Matches Ability	24.5%	31.5%	33.2%	33.7%	34.0%	36.8%
Could Do Better	75.5%	68.5%	66.8%	66.3%	66.0%	63.2%
<b><u>Child Had Individualized Education Plan in Last 6 Months</u></b>	(n = 2,749)	(n = 1,571)	(n = 1,066)	(n = 677)	(n = 380)	(n = 218)
Had IEP	64.1%	70.5%	73.8%	76.1%	80.0%	82.1%
Did Not Have IEP	35.9%	29.5%	26.2%	23.9%	20.0%	17.9%
<b><u>Reasons for IEP</u></b>	(n = 1,075)	(n = 1,067)	(n = 753)	(n = 499)	(n = 291)	(n = 174)
Behavioral/Emotional Problems	87.0%	88.0%	88.7%	87.8%	89.3%	92.5%
Learning Disability	58.9%	58.4%	56.8%	53.1%	53.3%	48.3%
Physical Disability	3.8%	3.0%	3.5%	3.0%	3.8%	3.4%
Developmental Disability/Mental Retardation	12.8%	13.3%	14.2%	13.4%	13.7%	13.2%
Vision or Hearing Impairment	4.3%	3.2%	3.1%	4.0%	5.5%	5.2%
Speech Impairment	11.4%	9.7%	8.5%	7.6%	8.9%	5.7%
Other Reason	0.8%	0.6%	0.3%	0.4%	0.3%	1.1%
<b><u>School Attendance in Last 6 Months</u></b>	(n = 2,285)	(n = 1,170)	(n = 801)	(n = 474)	(n = 276)	(n = 155)
Attended Regularly	67.7%	75.0%	77.7%	77.0%	78.6%	75.5%
Attended More Often than Not	18.3%	15.3%	14.4%	16.5%	13.8%	16.1%
Attended Infrequently	14.0%	9.7%	8.0%	6.5%	7.6%	8.4%
<b><u>Special Education</u></b>						
Child Took Classes Where Everyone Attending Was in Special Education	48.4%	51.9%	53.5%	54.6%	54.6%	56.3%
Child Took Classes Where Some Attending Were in Special Education, Others Not	30.2%	30.5%	29.0%	33.6%	32.9%	36.6%
	(n = 2,741)	(n = 1,554)	(n = 1,064)	(n = 678)	(n = 383)	(n = 213)
	(n = 2,697)	(n = 1,540)	(n = 1,046)	(n = 669)	(n = 377)	(n = 213)
<b><u>Percent of Day Spent in Special Education Classes</u></b>	(n = 2,489)	(n = 1,409)	(n = 960)	(n = 597)	(n = 331)	(n = 179)
0–25%	45.3%	41.6%	40.3%	41.0%	34.1%	41.9%
26–50%	8.8%	7.2%	8.5%	9.4%	11.2%	6.7%
51–75%	7.6%	8.2%	8.2%	8.2%	7.6%	8.9%
76–100%	36.0%	40.7%	40.8%	39.0%	46.5%	42.5%
Other	2.4%	2.3%	2.1%	2.3%	0.6%	0.0%
<b><u>School Performance Last 6 Months: Grades 1 Through 6</u></b>	(n = 1,128)	(n = 606)	(n = 408)	(n = 241)	(n = 130)	(n = 63)
Grade Average A	6.6%	9.4%	10.5%	10.4%	10.8%	6.3%
Grade Average B	24.0%	32.8%	29.9%	27.0%	30.0%	20.6%
Grade Average C	28.4%	28.9%	30.4%	29.5%	26.2%	34.9%
Grade Average D	9.0%	6.1%	5.4%	6.6%	11.5%	7.9%
Failing All or Most Classes	16.9%	10.1%	7.6%	10.0%	6.2%	12.7%
School Does Not Grade	12.4%	11.7%	13.7%	16.2%	13.8%	15.9%
Other	2.7%	1.0%	2.5%	0.4%	1.5%	1.6%

Grant Communities Funded in 1999–2000						
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b><u>School Performance Last 6 Months: Grades 7 and 8</u></b>	(n = 659)	(n = 383)	(n = 260)	(n = 171)	(n = 81)	(n = 48)
Grade Average A	6.1%	9.1%	8.8%	9.9%	3.7%	8.3%
Grade Average B	20.8%	30.0%	29.2%	35.7%	24.7%	33.3%
Grade Average C	34.3%	28.7%	36.5%	36.3%	49.4%	31.3%
Grade Average D	11.2%	9.7%	8.8%	5.8%	8.6%	12.5%
Failing All or Most Classes	24.1%	17.5%	11.5%	5.8%	9.9%	14.6%
School Does Not Grade	2.1%	3.9%	3.5%	5.8%	3.7%	0.0%
Other	1.4%	1.0%	1.5%	0.6%	0.0%	0.0%
<b><u>School Performance Last 6 Months: Grades 9 Through 12</u></b>	(n = 700)	(n = 450)	(n = 317)	(n = 218)	(n = 141)	(n = 89)
Grade Average A	7.0%	7.8%	9.8%	7.3%	11.3%	14.6%
Grade Average B	25.3%	25.6%	27.4%	27.5%	31.2%	28.1%
Grade Average C	28.9%	34.7%	35.0%	35.8%	35.5%	29.2%
Grade Average D	9.1%	10.0%	10.1%	11.0%	9.2%	12.4%
Failing All or Most Classes	25.1%	17.8%	12.9%	13.8%	10.6%	11.2%
School Does Not Grade	3.1%	3.3%	4.1%	4.6%	1.4%	4.5%
Other	1.4%	0.9%	0.6%	0.0%	0.7%	0.0%
<b><u>Type of Educational Placements<sup>c</sup></u></b>	(n = 2,820)	(n = 1,594)	(n = 1,084)	(n = 691)	(n = 385)	(n = 217)
Regular Public Day School	76.0%	71.4%	71.5%	71.3%	71.4%	74.7%
Regular Private or Boarding School	1.5%	1.2%	1.2%	1.3%	1.0%	0.5%
Home Schooling	1.5%	1.1%	0.6%	0.7%	0.5%	—
Home-based Instruction	1.9%	1.4%	0.8%	1.4%	0.3%	1.8%
Combination Home Schooling/Home-based Instruction	0.3%	0.5%	0.6%	0.3%	0.3%	—
Alternative/Special Day School	23.5%	25.3%	24.2%	23.7%	22.1%	22.6%
School in 24-Hour Hospital Setting	6.6%	4.0%	3.1%	3.6%	2.6%	1.8%
School in 24-Hour Juvenile Justice Facility	4.6%	3.1%	3.2%	4.5%	3.9%	3.2%
School in 24-Hour Residential Treatment Center	6.3%	6.3%	5.3%	4.9%	6.5%	4.1%
Other	2.3%	2.3%	2.1%	1.3%	1.8%	2.3%
<sup>c</sup> Because an individual may have more than one educational placement, the educational placement variable may add to more than 100%.						
<b><u>Disciplinary Actions in Past 6 Months</u></b>						
Detention	34.1%	27.7%	24.7%	22.4%	25.4%	24.0%
	(n = 2,745)	(n = 1,496)	(n = 1,019)	(n = 652)	(n = 362)	(n = 204)
Suspension	47.6%	37.1%	36.0%	31.9%	31.8%	29.2%
	(n = 2,779)	(n = 1,508)	(n = 1,027)	(n = 659)	(n = 365)	(n = 209)
Expulsion	7.8%	4.4%	3.9%	3.2%	3.8%	2.9%
	(n = 2,791)	(n = 1,510)	(n = 1,026)	(n = 658)	(n = 367)	(n = 208)

Grant Communities Funded in 1999–2000

	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b>Delinquency Survey (DS)</b>						
<b><u>Juvenile Delinquency in Past 6 Months</u></b>						
Accused of Breaking the Law	25.2% (n = 1,830)	18.4% (n = 979)	15.9% (n = 637)	15.0% (n = 386)	14.7% (n = 245)	14.2% (n = 134)
Arrested	24.0% (n = 1,833)	16.0% (n = 980)	13.5% (n = 635)	14.5% (n = 386)	12.2% (n = 245)	10.4% (n = 135)
Convicted of a Crime	14.2% (n = 1,828)	10.2% (n = 978)	8.3% (n = 640)	7.3% (n = 386)	5.3% (n = 246)	7.4% (n = 135)
On Probation	31.2% (n = 1,831)	29.6% (n = 981)	22.3% (n = 640)	20.2% (n = 386)	18.7% (n = 246)	17.0% (n = 135)
In Detention Center/Jail	22.2% (n = 1,799)	14.7% (n = 960)	12.7% (n = 630)	10.4% (n = 383)	12.3% (n = 243)	12.8% (n = 133)

Grant Communities Funded in 1999–2000

	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b>Substance Use Survey A (SUS-A)</b>						
<b><u>Have You Ever Used:</u></b>						
Cigarettes	51.5% (n = 1,834)	48.6% (n = 970)	48.8% (n = 640)	47.8% (n = 387)	52.1% (n = 242)	53.0% (n = 134)
Alcohol	44.4% (n = 1,835)	41.5% (n = 972)	42.1% (n = 642)	42.0% (n = 388)	44.2% (n = 242)	50.7% (n = 134)
Marijuana/Hashish	38.5% (n = 1,832)	35.0% (n = 968)	34.3% (n = 641)	34.2% (n = 389)	37.2% (n = 242)	39.6% (n = 134)
Cocaine in a Powder Form	5.8% (n = 1,831)	6.0% (n = 968)	5.6% (n = 640)	5.9% (n = 387)	9.1% (n = 241)	4.5% (n = 134)
LSD, Acid, PCP or Other Psychedelics	6.6% (n = 1,832)	6.5% (n = 968)	4.9% (n = 639)	5.9% (n = 388)	7.1% (n = 241)	2.2% (n = 134)
Non-Prescription or Over-the-Counter Drugs	7.0% (n = 1,826)	6.5% (n = 966)	5.0% (n = 639)	7.0% (n = 387)	7.0% (n = 242)	7.5% (n = 133)
Quaaludes (e.g., quads)	0.5% (n = 1,829)	0.7% (n = 968)	0.3% (n = 639)	1.0% (n = 389)	1.2% (n = 241)	0.0% (n = 134)
Heroin, Smack	1.9% (n = 1,831)	2.0% (n = 967)	1.9% (n = 640)	2.3% (n = 388)	0.8% (n = 241)	0.0% (n = 134)
Barbituates (e.g., downers)	2.5% (n = 1,830)	2.3% (n = 968)	1.7% (n = 640)	2.8% (n = 389)	2.1% (n = 241)	0.7% (n = 134)
Narcotics (e.g., morphine)	4.3% (n = 1,829)	3.2% (n = 968)	3.0% (n = 640)	4.9% (n = 388)	2.9% (n = 241)	4.5% (n = 134)
Crack or Rock in a Hard Chunk Form	2.9% (n = 1,832)	2.8% (n = 968)	2.5% (n = 640)	4.1% (n = 387)	3.7% (n = 241)	2.2% (n = 134)
Amphetamines	5.9% (n = 1,830)	5.5% (n = 967)	5.5% (n = 640)	5.1% (n = 389)	5.0% (n = 242)	3.7% (n = 134)
Tranquilizers (e.g., Valium)	4.0% (n = 1,829)	4.5% (n = 968)	4.2% (n = 639)	3.6% (n = 389)	5.0% (n = 241)	3.0% (n = 134)
Inhalants (e.g., spray cans)	7.8% (n = 1,831)	5.9% (n = 968)	5.6% (n = 640)	4.6% (n = 388)	5.0% (n = 241)	4.5% (n = 134)
<b><u>Substance Use in Last 6 Months</u></b>						
Cigarettes	35.2% (n = 1,832)	32.0% (n = 985)	31.3% (n = 646)	31.0% (n = 390)	32.8% (n = 244)	38.5% (n = 135)
Alcohol	22.6% (n = 1,834)	18.2% (n = 986)	18.6% (n = 646)	19.5% (n = 390)	21.6% (n = 245)	21.5% (n = 135)
Marijuana/Hashish	19.2% (n = 1,832)	14.8% (n = 985)	14.9% (n = 646)	14.4% (n = 390)	19.2% (n = 245)	15.6% (n = 135)

Grant Communities Funded in 1999–2000

	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b>Multi-Sector Service Contacts (MSSC)</b>						
<b><u>Traditional Services Received in Last 6 Months</u></b>						
Individual Therapy	n/a	79.1% (n = 1,539)	74.2% (n = 1,031)	70.2% (n = 641)	69.8% (n = 361)	71.9% (n = 199)
Case Management	n/a	78.8% (n = 1,538)	73.6% (n = 1,033)	72.5% (n = 641)	70.4% (n = 362)	65.7% (n = 198)
Assessment or Evaluation	n/a	64.4% (n = 1,527)	56.7% (n = 1,023)	49.8% (n = 639)	51.5% (n = 361)	51.8% (n = 195)
Medication Treatment/Monitoring	n/a	71.7% (n = 1,543)	71.6% (n = 1,032)	72.7% (n = 641)	72.9% (n = 362)	74.9% (n = 199)
Family Therapy	n/a	39.1% (n = 1,544)	33.4% (n = 1,028)	28.1% (n = 636)	27.8% (n = 360)	29.1% (n = 199)
Group Therapy	n/a	38.6% (n = 1,541)	35.6% (n = 1,029)	34.4% (n = 639)	34.6% (n = 358)	36.4% (n = 198)
Crisis Stabilization	n/a	20.9% (n = 1,547)	16.3% (n = 1,030)	15.9% (n = 642)	12.2% (n = 361)	13.6% (n = 198)
<b><u>Innovative Services Received in Last 6 Months</u></b>						
Recreational Activities	n/a	37.2% (n = 1,548)	38.3% (n = 1,030)	37.6% (n = 639)	39.5% (n = 362)	36.5% (n = 197)
Family Support	n/a	30.7% (n = 1,535)	26.0% (n = 1,027)	23.5% (n = 633)	23.2% (n = 358)	17.7% (n = 198)
Transportation	n/a	27.9% (n = 1,540)	27.0% (n = 1,034)	26.4% (n = 640)	25.2% (n = 361)	25.4% (n = 197)
Flexible Funds	n/a	26.7% (n = 1,529)	23.6% (n = 1,023)	21.1% (n = 635)	17.0% (n = 359)	16.7% (n = 198)
Behavioral/Therapeutic Aide	n/a	18.7% (n = 1,544)	18.7% (n = 1,028)	20.0% (n = 639)	21.3% (n = 362)	22.8% (n = 197)
Family Preservation	n/a	17.0% (n = 1,540)	12.3% (n = 1,027)	12.3% (n = 635)	9.2% (n = 359)	6.6% (n = 197)
Respite	n/a	18.1% (n = 1,546)	18.2% (n = 1,029)	16.9% (n = 638)	13.6% (n = 359)	18.8% (n = 197)
Transition	n/a	3.6% (n = 1,550)	3.4% (n = 1,031)	3.5% (n = 637)	5.0% (n = 360)	4.0% (n = 198)
Independent Living	n/a	3.3% (n = 1,549)	4.4% (n = 1,034)	4.4% (n = 641)	5.0% (n = 362)	9.6% (n = 198)
Afterschool Programs	n/a	13.4% (n = 1,542)	12.5% (n = 1,030)	13.1% (n = 635)	13.0% (n = 361)	13.7% (n = 197)

Grant Communities Funded in 1999–2000						
	Intake %	6 Months %	12 Months %	18 Months %	24 Months %	30 Months %
<b><u>Restrictive Services Received in Last 6 Months</u></b>						
Day Treatment	n/a	16.7% (n = 1,546)	15.2% (n = 1,035)	14.9% (n = 639)	13.3% (n = 362)	13.6% (n = 198)
Inpatient Hospitalization	n/a	12.8% (n = 1,550)	10.6% (n = 1,033)	11.9% (n = 641)	6.1% (n = 362)	7.1% (n = 198)
Residential Treatment Center	n/a	12.2% (n = 1,547)	12.3% (n = 1,035)	9.7% (n = 640)	12.7% (n = 361)	14.6% (n = 198)
Therapeutic Group Home	n/a	6.2% (n = 1,551)	5.5% (n = 1,031)	5.9% (n = 641)	7.2% (n = 362)	3.5% (n = 198)
Therapeutic Foster Care	n/a	5.4% (n = 1,543)	5.1% (n = 1,025)	4.7% (n = 638)	5.5% (n = 361)	5.2% (n = 192)
Residential Camp	n/a	5.6% (n = 1,545)	4.0% (n = 1,032)	4.5% (n = 641)	<b>5.0%</b> (n = 362)	<b>4.1%</b> (n = 197)
<b>Average Number of Service Types Received in Last 6 Months</b>	<b>n/a</b>	<b>6.4</b> (n = 1,553)	<b>5.9</b> (n = 1,037)	<b>5.6</b> (n = 643)	<b>5.5</b> (n = 362)	<b>5.5</b> (n = 199)

## APPENDIX D

### MEASURES

#### INTRODUCTION

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 outcomes study, caregivers reported on children's strengths (Behavioral and Emotional Rating Scale [BERS]; Epstein & Sharma, 1998), functional impairment (Child and Adolescent Functional Assessment Scale [CAFAS]; Hodges, 1990), behavioral and emotional problems (Child Behavior Checklist [CBCL]; Achenbach, 1991), caregiver strain (Caregiver Strain Questionnaire [CGSQ]; Brannan, Heflinger, & Bickman, 1997), educational history (EQ), family resources (Family Resource Scale [FRS]; Dunst & Leet, 1985), stability of the child's living situation (ROLES-R), and service utilization (MSSC). Children 11 years or older reported on their delinquent behaviors (DS) and history of substance use (SUS-AB). Caregivers reported on their family's functioning (Family Assessment Device [FAD]; Epstein, Baldwin, & Bishop, 1983) and their satisfaction with services (Family Satisfaction Questionnaire-Abbreviated [FSQ-A]). The following sections provide a brief list of the descriptive and outcome data collected and the specific measures used in the preparation of this report. The measures are listed in alphabetical order.

#### *Descriptive and Outcomes Study*

- Demographics, medications, chronic illnesses – Descriptive Information Questionnaire (DIQ)
- Caregiver strain – Caregiver Strain Questionnaire (CGSQ)
- Child behavior – Child Behavior Checklist (CBCL)
- Child functioning – Child and Adolescent Functional Assessment Scale (CAFAS)
- Child strengths – Behavioral and Emotional Rating Scale (BERS)
- Clinical history – Administrative Record (AR)
- Delinquent behaviors – Delinquency Survey (DS)
- Educational indicators – Education Questionnaire (EQ)
- Family functioning – Family Assessment Device (FAD)
- Family resources – Family Resource Scale (FRS)
- Family satisfaction – Family Satisfaction Questionnaire-Abbreviated (FSQ-A)
- Service use information – Multi-Sector Service Contacts (MSSC)
- Stability of living situations – Restrictiveness of Living Environments and Placement Stability Scale-Revised (ROLES-R)
- Substance abuse – Substance Use Survey (SUS-AB)

## ***Descriptions of the Descriptive and Outcome Measures***

### **Behavioral and Emotional Rating Scale (BERS)**

The BERS identifies the emotional and behavioral strengths of children. Whereas most existing assessment measures focus on deficits and problems, the BERS focuses on areas of strength and resiliency. The principal uses of the BERS include identifying children with limited strengths, targeting goals for an individual treatment plan, identifying strengths and weaknesses for intervention, documenting progress in a strength area as a consequence of specialized services, and measuring strengths in research and evaluation projects.

The 52-item checklist includes items that identify emotional and behavioral strengths of children across five dimensions of childhood strengths that correspond to the five subscales in the measure. The dimensions and subscales are Interpersonal Strength, Family Involvement, Intrapersonal Strength, School Functioning, and Affective Strength. Behaviors are rated on a 4-point scale: (0) *not at all like the child*, (1) *not much like the child*, (2) *like the child*, and (3) *very much like the child*.

The BERS has demonstrated test–retest reliability, interrater reliability, and internal consistency (Epstein, Cullinan, Harniss, & Ryser, 1999). Test–retest reliability coefficients for the BERS subscales ranged from .85 to .99 with a 10-day interval between the two ratings. Interrater reliability was tested using a sample of 96 students with emotional and behavioral disorders rated by their special education teachers. Cronbach’s alpha coefficients for the scales were .83 or above. Content validity (Epstein, 1999) and convergent validity (Harniss, Epstein, Ryser, & Pearson, 1999) have been established.

### **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 emotional and behavioral problems. It is currently being used in several studies of children’s mental health services. 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 contains 21 items that assess strain experienced by caregivers in the last 6 months related to the care of a child with emotional and behavioral challenges. It is comprised of three related dimensions of caregiver strain: Objective Strain, Subjective Internalizing Strain, and Subjective Externalizing Strain. The CGSQ is a 5-point scale with the following response options: (1) *not at all*, (2) *a little*, (3) *somewhat*, (4) *quite a bit*, and (5) *very much*.

The CGSQ demonstrated good reliability and validity in previous research. Confirmatory factor analysis findings from previous research with the CGSQ have supported the existence of three related dimensions of caregiver strain (Brannan, et al., 1997). The three CGSQ subscales demonstrated adequate internal consistency with alpha coefficients ranging from .73 to .91 (Heflinger, Northrup, Sonnichsen, & Brannan, 1998). In addition, the CGSQ subscales were found to correlate with measures of family functioning and caregiver distress in expected ways, providing evidence of construct validity (Brannan, et al., 1997). The

predictive validity of the CGSQ is supported by findings that the prediction of service utilization pattern by the CGSQ was above that provided by measures of the child's clinical and functional status (Foster, Summerfelt, & Saunders, 1996; Lambert, Brannan, Breda, Heflinger, & Bickman, 1998).

### Child and Adolescent Functional Assessment Scale (CAFAS)

The CAFAS is a widely used measure of child functioning. It assesses the degree to which a youth's mental health or substance abuse disorder is disruptive to his or her functioning in everyday life in each of eight psychosocial domains: the community, the school, the home, substance use, moods and emotions, self-harming behavior, behavior towards others, and thinking. The CAFAS is designed to assess the effects of the child's challenges and behaviors on his or her ability to function successfully in various life domains. For instance, a youth with a variety of symptoms as indicated on the CBCL may still function successfully in the community, in school, and in relationships with family and friends.

A score is assigned to each subscale by the CAFAS rater to designate the level of impairment the child is experiencing for that life domain. For each subscale, there is a "menu" of behaviors associated with each level of impairment. The four levels of severity are as follows:

- (30) Severe impairment (severe disruption or incapacitation)
- (20) Moderate impairment (major or persistent disruption)
- (10) Mild impairment (significant problems or distress)
- (0) Minimal or no impairment (no disruption of functioning)

Good interrater reliability has been found among a variety of raters, including mental health intake workers, providers, lay raters, and graduate students. Hodges & Wong (1996) reported that the most behaviorally oriented scales (e.g., community role and home role) had the highest reliability, with correlations for the total CAFAS score ranging from .92 to .96 across four different samples. Intra-class correlations for total scores ranged from .84 to .89. Adequate test-retest reliability has also been reported (Cross & McDonald, 1995). A variety of studies (e.g., Hodges, Lambert, & Summerfelt, 1994) demonstrated the construct, concurrent, and discriminant validity of the CAFAS when used with child clinical samples.

### Child Behavior Checklist (CBCL)

The CBCL is designed to provide a standardized measure of symptoms and behavioral and emotional problems among children aged 4 through 18 years. The CBCL has been widely used in children's mental health services research and for clinical purposes to assess social competence, behaviors, and feelings. The CBCL elicits a rich and detailed description of behaviors and symptoms that provides information beyond diagnosis.

Although it does not yield diagnoses, the CBCL assesses children's symptoms along a continuum and provides a total problems score; two broadband syndrome scores; eight narrow-band syndrome scores; and competence scores in activities, social, and school.

Achenbach (1991) has 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 ( $\alpha \geq .82$ ). The CBCL demonstrated good test-retest reliability after 7 days (Pearson  $r$  at or above .87 for all scales). Moderate to strong correlation with the Connor Parent Questionnaire and the Quay-Peterson scale (Pearson  $r$  coefficients ranged from .59 to .88) suggested the construct validity of the CBCL. The CBCL 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, 1991). A variety of other studies have also shown good criterion-related or discriminant validity (e.g., Barkley, 1988; McConaughy, 1993).

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

### Delinquency Survey (DS)

The Delinquency Survey gathers information reported by youth about their delinquent behaviors such as contact with law enforcement and juvenile justice. The questionnaire consists of 25 items that assess the youth's behaviors toward others in the community and contact with law enforcement, including criminal offenses, arrests, and probation. Nineteen of the 25 items ask specific questions about the youth's delinquent acts, such as fire setting, stealing, and property damage. These 19 items are coded along a 3-point scale that measures the frequency of these acts: (1) *none*, (2) *one time*, and (3) *two or more times*.

There is no formal reliability and validity information for the DS. However, field testing and review of the measure have been conducted in the comparison study communities funded in 1993 and 1994. Based on reliability analysis of the national evaluation data from grant communities funded in 1997–98, Cronbach's alpha coefficient for the 19 delinquent act items was .83.

### Descriptive Information Questionnaire (DIQ)

The DIQ was developed to provide a uniform method of collecting the descriptive data elements required by CMHS. DIQ information is collected at baseline and follow-up.

As a method for collecting descriptive information, conventional assessments of reliability and validity are not appropriate for the DIQ baseline version. However, data collected with the DIQ baseline version will be compared to descriptive data provided in the fiscal MISs used in the services and costs study to check for consistency.

### Education Questionnaire (EQ)

The EQ was developed to collect information on children's educational status and their experiences in school during the past 6 months. The EQ contains 21 questions, including items about school (1st grade through 12th grade) attendance; grade level; school

achievement; type of school setting (e.g., special or alternative school); reasons for placements; special education; overall academic performance; and whether the child has been suspended, detained, or expelled. The final items on the questionnaire assess availability and effectiveness of help (from the school) to meet the educational, behavioral, and/or emotional needs of the child.

There is no formal reliability and validity information for the EQ because items included on the questionnaire do not measure a single educational domain. However, the EQ has been reviewed and revised by experts with experience and knowledge in special education and education in general.

### Family Assessment Device (FAD)

Based on the multidimensional McMaster model of family functioning, the FAD is a self-report measure of how families interact, communicate, and work together (Epstein, et al., 1983). For the national evaluation of grant communities funded in 1997–98, the complete 60-item scale was used. For the national evaluation of grant communities funded in 1999–2000, only the General Functioning Scale (GFS), an abbreviated version of the complete measure, was used.

Internal consistency has been good across many studies and samples, with alphas ranging from .71 to .92 across the seven subscales (Byles, Byrne, Boyle, & Offord, 1988; Heflinger, et al., 1998; Perosa & Perosa, 1990). Test–retest reliability after 7 days was also found to be good with correlations for most subscales above .70 (Kabacoff, Miller, Bishop, Epstein, & Keitner, 1990; Miller, Epstein, Bishop, & Keitner, 1985). Construct validity has been supported in several studies, with the FAD correlating in the expected directions with other measures of family functioning, family cohesion, marital satisfaction, and other family factors (Byles, et al., 1988; Epstein et al., 1983; Fristad, 1989; Heflinger et al., 1998; Miller, et al., 1985). The FAD demonstrated good predictive validity, distinguishing between families in clinical treatment and those who were not (e.g., Epstein, et al., 1983; Fristad, 1989). In addition, the FAD did not correlate significantly with the Marlowe–Crowne Social Desirability Scale (Crowne & Marlowe, 1960), suggesting that responses to the FAD were not greatly influenced by social desirability.

Validity was further indicated by confirmatory factor analyses that supported the original scale structure; 90 percent of the items loaded on the factors hypothesized by the McMaster model (Kabacoff, et al., 1990). This factor structure held across three separate samples.

### Family Resource Scale (FRS)

The FRS is used to assess the caregiver’s perception of the adequacy of the resources (e.g., food, shelter, money for bills) available to the family in the past 6 months. The FRS was developed for use with families of children with special needs and has been used with families of children with serious emotional disturbance. The FRS is based on the premise that the adequacy of resources necessary to meet individually identified needs will affect both family well-being and caregiver capacity to participate fully in child treatment and care plans.

The scale includes 30 items that assess adequacy of resources for the family. Some items inquire about basic necessities, and other items inquire about resources beyond those needed for basic physical survival. Five response options are used to assess the adequacy of each resource: (1) *not at all adequate*, (2) *seldom adequate*, (3) *sometimes adequate*, (4) *usually adequate*, and (5) *almost always adequate*.

The reliability and validity information on the FRS comes from studies of two populations: children who were retarded, handicapped, or developmentally at risk (Dunst & Leet, 1987), and children with emotional and behavioral disturbance (Heflinger, et al., 1998). In both samples, good internal consistency among all the items was demonstrated, with alpha coefficients ranging from .92 to .95 (Dunst & Leet, 1987; Heflinger, et al., 1998). Test–retest reliability after 2–3 months was .52 (Dunst & Leet, 1987).

Exploratory factor analysis suggested good construct validity yielding eight factors that accounted for 75 percent of the variance (Dunst, Leet, & Trivette, 1988). Construct validity was further supported in correlational analyses that found statistically significant relationships, in the hypothesized directions, between the FRS total score and other family variables such as caregiver strain, family functioning, negative life events, social support, and parental distress (Heflinger, et al., 1998). In addition, the FRS demonstrated good criterion validity, with family resources found to be predictive of commitment to carrying out prescribed child treatment plans (Dunst, et al., 1988).

### Family Satisfaction Questionnaire–Abbreviated Version (FSQ–A)

The FSQ–A assesses the caregiver’s satisfaction in the past 6 months. It contains one screening question followed by 14 items divided into two parts. The initial screening question asks whether the caregiver, youth, and/or his or her family have received any services in the past 6 months. If not, the remainder of the questionnaire is skipped.

The first part of the FSQ–A contains seven items that assess the caregiver’s satisfaction with services as a whole, the child’s progress, and the cultural competence and family-focused nature of services. Respondents report their satisfaction on a 5-point scale: (1) *very dissatisfied*, (2) *dissatisfied*, (3) *neutral*, (4) *satisfied*, and (5) *very satisfied*. The second part of the FSQ–A contains seven items that assess whether the services the family received improved the caregiver’s (or other family member’s) ability to work for pay, and quantifies the impact in terms of days worked.

The measures from which the satisfaction items were extracted have demonstrated internal consistency in their original forms. The items collected for the abbreviated versions also demonstrated internal consistency. Based on reliability analysis of the national evaluation data from grant communities funded in 1997–98, Cronbach’s alpha coefficient for the seven satisfaction rating items (Item 1 through Item 7) was .88.

### Multi-Sector Service Contacts (MSSC)

The MSSC assesses the types and frequencies of services children and families receive across different service settings and child-serving sectors as well as the caregiver’s perceptions about whether services met the child and family’s needs. The MSSC identifies

the services received; service settings; and the location, frequency, and sequence of services for 22 different types of services.

Based on reliability analysis of the national evaluation data from grant communities funded in 1997–98, Cronbach’s alpha coefficient was .98 for the 22 items (Items 3, 4, 5, etc.) that asked about whether a child received services or not in the past 6 months.

### Restrictiveness of Living Environments and Placement Stability Scale–Revised Version (ROLES–R)

Originally developed to operationalize the concept of restrictiveness, this scale incorporates an adapted version of the Restrictiveness of Living Environments Scale (ROLES) with a Placement Stability Scale. In the original scale, ratings of restrictiveness were associated with each of the living arrangements or placements. In this revised version, the ratings are not calculated but valuable information about the type of placement and length of stay is captured.

Collecting information regarding the nature of children’s living environments helps determine how the type and number of living arrangements may affect children’s lives. For instance, children with fewer changes in living environments within a 6-month period may experience more stability.

The ROLES–R documents the settings in which children have lived (starting with the most recent settings) during the past 6 months. There are 27 placement categories, including the following:

- Independent, living by self
- Living independently in community with minimal supervision
- Two parents/caregivers, at least one biological
- Biological mother only, without partner
- Camp
- Supervised independent living
- Foster care

No formal reliability and validity information is available on the original ROLES; however, expected relationships have been found between levels of restrictiveness, as assessed with the original ROLES, and programmatic variables. The original 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).

### Substance Use Survey (SUS–AB)

The SUS–AB provides important information regarding the self-reported substance abuse of the children and youth in the national evaluation.

The SUS–AB has two parts:

- SUS–A. The SUS–A collects information about the frequency of a youth’s substance use, including use of cigarettes, alcohol, and other drugs.
- SUS–B. The SUS–B focuses on the consequences of substance use that youth have experienced ever and during the past 6 months. The SUS–B is adapted from the Child and Adolescent Functional Assessment Scale (CAFAS) Parent Report with permission of the author and is for use only in the CMHS national evaluation.

**SUS–A.** The first nine items measure a youth’s use of alcohol (including history and frequency of drinking behaviors) and cigarettes. The next 12 items focus on the youth’s use of illegal substances. The remaining items assess the youth’s illicit use of prescription drugs and use of nonprescription or over-the-counter drugs for recreational purposes. Response options for the first nine items include yes/no and multiple choice. Response options for the next 12 items include yes/no (e.g., ever used substance, yes or no), fill-in-the-blank (e.g., age at first usage, number of times used in past 30 days), and multiple choice.

**SUS–B.** Twenty-one items assess the consequences of the youth’s alcohol or drug use. Questions ask about the youth’s lifetime experiences (ever) and the consequences experienced in the past 6 months. Response options for the SUS–B are yes/no (e.g., were consequences of usage experienced, yes or no).

Based on reliability analysis of the national evaluation data from grant communities funded in 1997–98, Cronbach’s alpha coefficient for the items on lifetime substance use on the SUS–A (SUS–A Items 1, 6, 10, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 18a, 19a, 20a, and 21a) was .84. Cronbach’s alpha coefficient for the lifetime consequence items on the SUS–B (all the a. items on the SUS–B, e.g., Items 1a, 2a, 3a, etc.) was .89.

## APPENDIX E

### SUPPORTING MATERIALS

#### LATENT CLASS ANALYSIS (LCA)

Latent Class Analysis (LCA) is a statistical method for finding subtypes of related cases (latent classes) from multivariate categorical data. The following section presents the detailed results for the LCA described in the Program Characteristics section.

#### *Results of LCA on Presenting Problems for Boys and Girls*

To determine the best fitting model, models with increasing numbers of classes were compared. The Bayesian Information Criterion (BIC) and the sample size adjusted Bayesian Information Criterion (SSA BIC) were used for model comparison; lower scores represent better fitting models. In addition, the Lo-Mendell-Rubin likelihood ratio test of model fit, and an adjusted version, were used to compare the estimated and alternative models. Finally, a summary measure of the overall classification quality was given by the entropy measure. Entropy values range from zero to one, with values closer to one indicating better classifications of individuals to specific classes. The estimation for a model with an increasing number of classes was stopped when none of the fit indices showed further improvement. Tables E-1 and E-2 summarize the results of model fitting for boys and girls separately. The fit statistics for the final selected models are bolded in each table.

**Table E-1. Presenting Problems LCA Modeling Fitting Results for Boys**

No. of Classes	AIC	BIC	SSABIC	Entropy	VLMR LRT	LMR Adj LRT
1	81216.88	81266.64	81244.40	---	---	---
2	76686.43	76793.06	76745.39	.72	$p < .0001$	$p < .0001$
3	76123.89	76287.39	76214.30	.57	$p < .0001$	$p < .0001$
4	75784.32	76004.68	75906.17	.66	$p < .0001$	$p < .0001$
5	<b>75474.47</b>	<b>75751.69</b>	<b>75627.76</b>	<b>.68</b>	<b><math>p &lt; .0001</math></b>	<b><math>p &lt; .0001</math></b>
6	75372.85	75706.94	75557.58	.69	$p = .1006$	$p = .1028$
7	75266.29	75657.25	75482.47	.72	$p < .0001$	$p < .0001$

**Table E-2. Presenting Problems LCA Modeling Fitting Results for Girls**

No. of Classes	AIC	BIC	SSABIC	Entropy	VLMR LRT	LMR Adj LRT
1	44554.58	44599.99	44577.75	---	---	---
2	41212.19	41309.50	41261.83	.73	$p < .0001$	$p < .0001$
3	40776.606	40925.815	40852.729	.70	$p < .0001$	$p < .0001$
4	40626.376	40827.484	40728.977	.70	$p = .0001$	$p = .0002$
5	40418.469	40671.476	40547.548	.68	$p < .0001$	$p < .0001$
<b>6</b>	<b>40334.928</b>	<b>40639.833</b>	<b>40490.484</b>	<b>.68</b>	<b><math>p = .0020</math></b>	<b><math>p = .0021</math></b>
7	40329.182	40685.986	40511.216	.74	$p = .0007$	$p = .0008$
8	40302.011	40697.740	40503.903	.65	$p = .3242$	$p = .3284$

Table E-3 presents the conditional probabilities of each presenting problem indicator for each class for boys. Table E-4 presents the conditional probabilities of each presenting problem indicator for each class for girls. For example, Table E-3 indicates that boys in Class 1 had only a 0.047 probability (4.7 percent) of having a presenting problem of suicidality/self-harm, while boys in Class 5 had a 0.520 (52.0 percent) probability of having that same problem. Therefore, using these conditional probabilities, the characteristics of each class can be examined. In addition, the probabilities of having a particular problem can be compared across classes. Shading emphasizes the salient presenting problem characteristics of children in each class.

**Table E-3. Presenting Problems LCA Class Membership Probabilities for Boys**

Presenting Problem	Class 1 ( <i>n</i> = 416)	Class 2 ( <i>n</i> = 3,442)	Class 3 ( <i>n</i> = 659)	Class 4 ( <i>n</i> = 2,110)	Class 5 ( <i>n</i> = 2,404)
Suicidality/Self-harm	0.047	0.112	0.380	0.058	0.520
Depression	0.006	0.092	0.960	0.435	0.867
Hyperactivity	0.074	0.112	0.236	1.000	0.893
Conduct Problems	0.069	0.694	0.502	0.757	0.991
Delinquency	0.020	0.592	0.407	0.374	0.896
Adjustment	0.094	0.373	0.655	0.801	0.970
Other	1.000	0.268	0.292	0.211	0.696

**Table E-4. Presenting Problems LCA Class Membership Probabilities for Girls**

Presenting Problem	Class 1 ( <i>n</i> = 306)	Class 2 ( <i>n</i> = 1,577)	Class 3 ( <i>n</i> = 929)	Class 4 ( <i>n</i> = 455)	Class 5 ( <i>n</i> = 595)	Class 6 ( <i>n</i> = 595)
Suicidality/Self-harm	0.136	0.199	0.360	0.081	0.074	1.000
Depression	0.055	0.051	1.000	0.544	0.613	0.936
Hyperactivity	0.018	0.082	0.061	0.836	0.739	0.780
Conduct Problems	0.066	0.660	0.341	0.603	0.923	0.957
Delinquency	0.119	0.568	0.304	0.000	0.810	0.925
Adjustment	0.113	0.315	0.448	0.746	0.961	0.974
Other	1.000	0.233	0.276	0.237	0.418	0.670

## FINDINGS ON CHRONIC CONDITIONS AND CHILD AND FAMILY RISK FACTORS

Table E-5 presents findings from regression models that examine the effects of chronic conditions on clinical impairment, specifically, the relationships between chronic physical health problems, child and family characteristics, and emotional and behavioral problems at intake. Several regression models were computed using behavioral and emotional problems (i.e., the CBCL) and functional impairment (i.e., the CAFAS) as the dependent variables and individual child and family characteristics as covariates.

**Table E-5. The Effect of Chronic Conditions and Child and Family Risk Factors on Clinical Impairment**

Covariates	BETA	Significance	R Square Change	Sig F Change
Does your child have a recurring or chronic health problem?	0.112	$p < 0.001$	0.013	$p < 0.001$
Does your child have a recurring or chronic health problem?	0.059	$p < 0.01$	0.140	$p < 0.001$
Has child received outpatient services in the previous 12 months?	0.093	$p < 0.001$		
Has child received school based services in the previous 12 months?	0.103	$p < 0.001$		
Has child been physically abused?	0.032	$p > 0.05$		
Has child been sexually abused?	0.066	$p < 0.01$		
Has child attempted suicide?	0.147	$p < 0.001$		
Is there a history of family violence/spousal abuse in biological family, but child was not the direct target?	0.038	$p > 0.05$		
Is there a history of mental illness in child's biological family?	0.201	$p < 0.001$		
Is there a history of substance abuse among biological family members?	0.010	$p > 0.05$		
Does any member of child's household have chronic health problems?	0.053	$p < 0.05$		

## RELIABLE CHANGE INDEX

Because numeric change may vary in magnitude and implications for actual behavioral change are often difficult to interpret, we provide a quantitative indicator of clinical change for clinical outcome measures. The reliable change index (RCI; Jacobson, Roberts, Berns, & McGlinchey, 1999; Jacobson & Truax, 1991; Speer & Greenbaum, 1995) is used to assess whether individual behavioral and emotional change over time was clinically significant. This statistic compares a child's scores at two different points in time, adjusting for the reliability of the measure, and indicates whether a change in scores shows clinically significant improvement, stability, or deterioration. Improvement and deterioration are defined as a difference in outcome scores adjusted for measurement error of the outcome, which exceeds the 95 percent confidence bounds around a change score of 0. In other words, a difference of that magnitude would not be expected simply due to the unreliability of the measure.

## FINDINGS FROM THE PHASE II COMPARISON STUDY

Table E-6 presents demographic and clinical comparisons at intake between the comparison study sites.

**Table E-6. Phase II Comparison Study Intake Descriptive Statistics**

	Birmingham (N = 202)	Montgomery (N = 189)
Average Age	13.8	11.5
Male	62.4%	56.1%
Income < \$15,000	42.4%	64.5%
Average # of Child Risk Factors	1.2	0.6
Average # of Family Risk Factors	2.6	2.5
Internalizing Problems Score > 63	45.0%	52.4%
Externalizing Problems Score > 63	74.3%	66.7%
CAFAS score > 90	66.8%	44.4%
BERS score < 90	59.4%	53.5%
Referred From Courts/Corrections	63.9%	3.3%

Table E-7 presents demographic and clinical comparisons at intake between the comparison study sites and across those with and without juvenile justice involvement.

**Table E-7. Phase II Comparison Study  
Intake Descriptive Statistics by Juvenile Justice Involvement**

Variable	Birmingham (N = 202)		Montgomery (N = 189)	
	JJ Contact (n = 94)	No JJ Contact (n = 108)	JJ Contact (n = 26)	No JJ Contact (n = 163)
Average Age	14.1	13.4	13.6	11.2
Male	66.0%	59.3%	69.2%	54.0%
Income < \$15,000	43.0%	41.9%	80%	62.1%
Average # of Child Risk Factors	1.3	1.1	0.8	0.5
Average # of Family Risk Factors	2.4	2.7	2.5	2.5
Internalizing Problems Score > 63	49.0%	41.7%	42.3%	54.0%
Externalizing Problems Score > 63	77.7%	71.3%	80.8%	64.4%
CAFAS Score > 90	71.3%	63.0%	53.8%	42.9%
BERS Score < 90	58.5%	60.2%	53.8%	53.4%

Table E-8 presents the effects of demographic and clinical characteristics and comparison site on crime rates.

**Table E-8. Phase II Comparison Study Logistic Regression Estimates of Crime Rate Models**

	Model 1 Estimates	Model 2 Estimates
SOC	2.95** (0.29)	2.67** (0.31)
Time	0.37 (0.33)	0.39 (0.34)
SOC Time	-1.21** (0.39)	-1.32** (0.40)
Age		0.25** (0.04)
Male		0.41* (0.19)
Income < 45,000		0.42* (0.19)
CAFAS > 90		0.38* (0.19)
	N = 768, Pseudo R <sup>2</sup> = 0.21	N = 768, Pseudo R <sup>2</sup> = 0.26

Both models included constant term. Standard errors are in parentheses.

\* Significant at 5% level.

\*\* Significant at 10% level.

## AGGREGATE SYSTEM OF CARE ASSESSMENT SCORES FOR SYSTEM OF CARE PROVIDERS

Table E-9 presents the mean aggregate infrastructure, service delivery, and overall system of care assessment scores for each system of care principle.

**Table E-9. Mean Aggregate System of Care Assessment Scores  
across Assessment Points for Each Principle**

Assessment Point	Family Focused			Individualized			Culturally Competent			Interagency		
	OV	IF	SD	OV	IF	SD	OV	IF	SD	OV	IF	SD
<b>1</b> (n = 36)	3.93 (0.23)	3.82 (0.45)	3.97 (0.27)	3.69 (0.26)	3.25 (0.39)	3.81 (0.29)	2.95 (0.65)	2.54 (0.71)	3.09 (0.72)	3.14 (0.37)	2.93 (0.51)	3.53 (0.53)
<b>2</b> (n = 47)	4.02 (0.34)	3.95 (0.62)	4.04 (0.37)	3.81 (0.32)	3.47 (0.46)	3.91 (0.33)	3.19 (0.67)	3.08 (0.73)	3.22 (0.73)	3.26 (0.42)	3.05 (0.54)	3.61 (0.48)
<b>3</b> (n = 35)	4.09 (0.29)	4.08 (0.54)	4.10 (0.27)	3.88 (0.29)	3.67 (0.47)	3.96 (0.30)	3.28 (0.61)	3.18 (0.73)	3.31 (0.64)	3.44 (0.48)	3.37 (0.56)	3.61 (0.57)
<b>4</b> (n = 19)	4.05 (0.24)	3.93 (0.50)	4.08 (0.29)	3.87 (0.26)	3.71 (0.49)	3.94 (0.28)	3.25 (0.56)	3.19 (0.86)	3.26 (0.56)	3.25 (0.56)	3.02 (0.71)	3.63 (0.56)
<b>5</b> (n = 11)	3.95 (0.29)	3.96 (0.61)	3.92 (0.28)	3.80 (0.32)	3.75 (0.46)	3.85 (0.33)	3.14 (0.56)	3.18 (0.78)	3.15 (0.57)	3.33 (0.53)	3.18 (0.57)	3.59 (0.59)

Assessment Point	Collaborative and Coordinated			Accessible			Community Based			Least Restrictive		
	OV	IF	SD	OV	IF	SD	OV	IF	SD	OV	IF	SD
<b>1</b> (n = 36)	3.45 (0.34)	3.07 (0.59)	3.59 (0.33)	3.85 (0.33)	3.17 (0.53)	3.99 (0.31)	3.51 (0.51)	3.05 (0.59)	3.84 (0.66)	3.13 (0.54)	2.87 (0.60)	3.50 (0.75)
<b>2</b> (n = 47)	3.68 (0.34)	3.43 (0.40)	3.76 (0.39)	3.95 (0.32)	3.45 (0.54)	4.06 (0.30)	3.63 (0.53)	3.32 (0.59)	3.83 (0.67)	3.53 (0.59)	3.34 (0.73)	3.78 (0.68)
<b>3</b> (n = 35)	3.87 (0.40)	3.83 (0.56)	3.89 (0.40)	4.05 (0.29)	3.76 (0.51)	4.12 (0.28)	3.82 (0.54)	3.69 (0.58)	3.90 (0.60)	3.75 (0.47)	3.57 (0.62)	3.95 (0.55)
<b>4</b> (n = 19)	3.76 (0.30)	3.58 (0.51)	3.82 (0.31)	3.98 (0.27)	3.62 (0.56)	4.05 (0.26)	3.65 (0.48)	3.47 (0.46)	3.77 (0.59)	3.69 (0.46)	3.50 (0.74)	3.88 (0.58)
<b>5</b> (n = 11)	3.91 (0.28)	3.84 (0.43)	3.93 (0.34)	4.01 (0.37)	3.77 (0.70)	4.04 (0.39)	3.59 (0.61)	3.42 (0.62)	3.72 (0.68)	3.81 (0.48)	3.44 (0.60)	4.18 (0.56)

Note: OV = overall score for principle.  
IF = infrastructure level score for principle.  
SD = service delivery score for principle.

## FINDINGS FROM THE EVIDENCE-BASED TREATMENT SURVEY

Table E-10 presents descriptive characteristics of service providers who responded to the Evidence-Based Treatment Survey by gender.

**Table E-10. Evidence-Based Treatment Survey Respondent Descriptive Characteristics by Gender**

	Female	Male	Total
Average age (N = 425)	41.7	43.1	42.2
Average number of years in current delivery system (N = 408)	5.9	6.4	6.0
Average number of years as mental health provider (N = 423)	10.3	13.4	11.3
Average number of years as mental health provider for children with serious emotional disturbance (N = 420)	8.1	11.4	9.1
	<b>Female (N = 288)</b>	<b>Male (N = 136)</b>	<b>Total</b>
<b>Race</b>			
White	86.1%	83.1%	85.1%
Black or African Descent	5.9%	5.1%	5.7%
Hispanic	3.8%	5.1%	4.2%
American Indian or Alaska Native	0.7%	0.7%	0.7%
Asian	0.3%	0.7%	0.5%
Native Hawaiian or Other Pacific Islander	0.3%	0.7%	0.5%
Multi-Cultural	1.8%	2.9%	2.1%
Other, not specified	1.0%	1.5%	1.2%
<b>Licensed Mental Health Provider</b>			
Yes	74.0%	80.9%	76.2%
No	26.0%	19.1%	23.8%
<b>Highest Degree of Education</b>			
Doctoral Degree	13.5%	26.5%	17.7%
Master's Degree	74.3%	65.4%	71.5%
Bachelor's Degree	11.1%	8.1%	10.1%
Less Than Bachelor's Degree	1.0%	0.0%	0.7%
	<b>Female (N = 286)</b>	<b>Male (N = 135)</b>	<b>Total</b>
<b>Primary Employer</b>			
Mental Health Agency	56.3%	60.0%	57.5%
Private Mental Health Agency	18.9%	15.6%	17.8%
Hospital	5.6%	6.7%	5.9%
School	5.2%	3.0%	4.5%
Child Welfare / Social Service Agency	3.8%	7.4%	5.0%
Juvenile Justice	1.7%	0.7%	1.4%
Residential Treatment	2.1%	5.2%	3.1%
Other	6.3%	0.7%	4.5%
	<b>Female (N = 260)</b>	<b>Male (N = 129)</b>	<b>Total</b>
<b>Primary Field of Degree</b>			
Counseling	19.2%	20.2%	19.5%
Psychology	28.5%	31.8%	29.6%
Social Work	30.8%	24.0%	28.5%
Education	3.1%	1.6%	2.6%
Medicine/Psychiatry	2.7%	6.2%	3.9%
Other Social Sciences Degrees	6.2%	2.3%	4.9%

	Female (N = 260)	Male (N = 129)	Total
<b>Primary Field of Degree (continued)</b>			
Nursing	1.5%	0.0%	1.0%
More Than One Degree (with one mental health-related degree)	8.1%	14.0%	10.0%

Table E-11 presents the percent of respondents who indicated familiarity with listed evidence-based treatments and their perceived effectiveness and use.

**Table E-11. Evidence-Based Treatment Survey of Evidence-Based Practices Familiarity, Perceived Effectiveness, and Use**

	Familiar with EBP (N = 440)	Does treatment result in positive outcomes (N = 440)?			Use EBP in the Course of Work (N = 467)
		Yes	No	Don't Know	
Family Education and Support	93.4%	92.3%	1.6%	6.2%	14.3%
Social Skills Training	99.1%	91.4%	2.7%	5.6%	13.1%
Anti-Depressants for Mood Disorders	100.0%	89.8%	1.8%	8.4%	n/a
Cognitive Behavioral Therapy	97.7%	89.5%	1.6%	7.3%	62.1%
Behavior Therapy	98.6%	87.7%	4.8%	6.7%	9.4%
Stimulant Medication for ADHD	99.5%	86.1%	3.6%	10.3%	n/a
Modeling	99.1%	85.2%	1.8%	13.0%	6.9%
Anger Coping/Management	98.6%	84.3%	2.7%	12.7%	14.6%
Problem Solving Skills Training	97.5%	83.7%	1.8%	14.0%	5.1%
Case Management	99.5%	81.8%	4.8%	13.2%	11.8%
Mentoring	98.9%	81.4%	3.7%	14.7%	1.9%
Relaxation Therapy	98.4%	80.0%	2.7%	17.3%	7.1%
Respite	98.9%	76.1%	4.8%	18.9%	0.9%
Wraparound	94.5%	75.9%	5.5%	18.2%	17.6%
Behavioral Parent Training	91.1%	75.5%	1.1%	23.4%	0.0%
Parent-Child Interaction Therapy	83.3%	70.1%	1.1%	27.9%	7.5%
Assertiveness Training	96.1%	69.5%	3.0%	27.3%	3.6%
Multi-Systemic Therapy	87.2%	67.8%	1.6%	30.4%	8.4%
Therapeutic Foster Care	97.0%	66.7%	7.7%	25.3%	2.6%
Parent Management Training	80.3%	64.4%	1.1%	34.4%	8.1%
Interpersonal Therapy for Adolescents	84.3%	59.0%	4.3%	36.3%	0.0%
Systematic Desensitization	92.3%	56.6%	6.8%	36.7%	3.0%
Brief Strategic Family Therapy	90.3%	56.5%	7.8%	35.4%	4.5%
Rational Emotive Therapy	89.6%	51.7%	8.2%	39.9%	10.1%
Functional Family Therapy	73.7%	48.5%	1.8%	49.6%	4.7%
Common Sense Parenting	70.4%	45.8%	3.6%	50.4%	1.3%
Cognitive Behavioral Group Therapy for Adolescents	95.2%	45.8%	3.6%	50.4%	0.0%
Self-Control Instruction Training	71.0%	45.2%	3.7%	51.1%	0.6%
Behavioral Teacher Training	71.6%	40.7%	3.7%	55.6%	0.0%
Exposure Therapy	70.1%	30.8%	8.0%	61.0%	2.1%
Emotive Imagery Therapy	62.8%	18.9%	8.3%	72.8%	0.0%
Voucher-based Contingency Management	39.5%	14.8%	3.7%	81.5%	1.7%
Webster Stratton's Parent Child Series	18.1%	6.4%	1.1%	92.5%	0.0%

## LIST OF SELECTED SYSTEM OF CARE COMMUNITIES' WEB SITES

Table E-12 presents a select list of system of care communities that have developed a Web site.

**Table E-12. System of Care Communities' Web-Sites**

System of Care Community	Web Site
Fairbanks Native Association, AK	<a href="http://www.childrenareprecious.org">http://www.childrenareprecious.org</a>
Denver, Jefferson, Clear Creek, and Gilpin counties, CO	<a href="http://www.coloradocornerstone.org">http://www.coloradocornerstone.org</a>
Worcester, MA	<a href="http://users.umassmed.edu/marian.butler/">http://users.umassmed.edu/marian.butler/</a>
Kandiyohi, Meeker, Renville, and Yellow Medicine counties in West Central MN	<a href="http://www.pact4.org">http://www.pact4.org</a>
Westchester County, NY	<a href="http://www.westchestercommunitynetwork.com/">http://www.westchestercommunitynetwork.com/</a>
Nashville, TN	<a href="http://www.tnvoices.org">http://www.tnvoices.org</a>
Region II of West Virginia (12 counties)	<a href="http://www.orgsites.com/wv/msfa/">http://www.orgsites.com/wv/msfa/</a>
Rockdale and Gwinnett counties, GA	<a href="http://www.grncsb.com">http://www.grncsb.com</a>
Monterey County, CA	<a href="http://www.co.monterey.ca.us/health/BehavioralHealth/">http://www.co.monterey.ca.us/health/BehavioralHealth/</a>
City of Oakland, CA	<a href="http://www.nativehealth.org">http://www.nativehealth.org</a>
Sacramento County, CA	<a href="http://www.sacdhhs.com/default.asp?woID=men&amp;mode=">http://www.sacdhhs.com/default.asp?woID=men&amp;mode=</a>
San Francisco, CA	<a href="http://www.dph.sf.ca.us">http://www.dph.sf.ca.us</a>
Contra Costa County, CA	<a href="http://www.co.contra-costa.ca.us">http://www.co.contra-costa.ca.us</a>
Humboldt and Del Norte counties, CA	<a href="http://www.uihs.org">http://www.uihs.org</a>
Delaware	<a href="http://www.state.de.us/kids">http://www.state.de.us/kids</a>
11 counties in NC	<a href="http://www.dhhs.state.nc.us/mhddsas/childandfamily/index.htm?">http://www.dhhs.state.nc.us/mhddsas/childandfamily/index.htm?</a>
Greenwood, SC	<a href="http://www.gatewaystosuccess.s5.com">http://www.gatewaystosuccess.s5.com</a>
Oglala Sioux Tribe, Pine Ridge Indian Reservation, Pine Ridge, SC	<a href="http://www.wakanyeja.org">http://www.wakanyeja.org</a>
Connecticut	<a href="http://www.theparkproject.org">http://www.theparkproject.org</a>
Broward County, FL	<a href="http://www.broward.org/onecommunity">http://www.broward.org/onecommunity</a>
Idaho	<a href="http://www.idahochild.org">http://www.idahochild.org</a>
Choctaw Nation, OK	<a href="http://www.odmhsas.org">http://www.odmhsas.org</a>
Fort Worth, TX	<a href="http://www.mentalhealthconnection.org">http://www.mentalhealthconnection.org</a>
Marion County, IN	<a href="http://www.ChoicesTeam.org">http://www.ChoicesTeam.org</a>



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