



# System-of-Care Evaluation Brief

## Caregiver Reports of Service Use in Systems of Care

The system-of-care program model used in the Comprehensive Community Mental Health Services Program for Children and Their Families Program provides guidelines as to how a children's mental health service system should be organized and what principles providers should follow when serving children. The effectiveness of systems of care depends upon the ability of a system to provide a service use experience that is appropriate to the individual needs of each child and family served. Understanding the types of services used in systems of care and the mix of the various types of services used by children and their families provides valuable information to inform future planning efforts. In addition, this information indicates whether children and families are receiving the array of services they need and helps identify services that may be available but underutilized.

### Service Data from Caregiver Reports

Data from the national evaluation funded by the Center for Mental Health Services (CMHS) were used to examine service use in systems of care. The data were collected from 1,875 children and families participating in the outcome study of the national evaluation using the Multi-Sector Services Contacts Questionnaire. Six months after entry into services caregivers were asked to report on the services their children received during their first 6 months.

Types of services were classified into one of three categories based on service restrictiveness and approach: (a) traditional, (b) innovative, or (c) restrictive. Overall, only 1.5% of the 1,875 children were reported to have received no services at all after 6 months of enrollment in systems of care. Of those who did receive services ( $n = 1,846$ ), the average number of services was 6.2, with a higher percentage of children and families receiving traditional or innovative services than receiving restrictive services.

The data indicated that children and families served in systems of care received a number of different services, with the majority receiving traditional services regardless of whether they received innovative or restrictive services. In addition, children and families received a mix of services based on individual needs, rather than receiving only restrictive, only traditional, or only innovative

*System-of-Care Evaluation Briefs* report findings from the National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program funded by the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration. The Program provides six-year grants and cooperative agreements to states, political subdivisions of states, American Indian Tribes, tribal organizations, and territories to support the development of community-based systems of care for children with serious emotional disturbance and their families. Systems of care are developed using an approach that emphasizes integration of services through collaborative arrangements between child-serving sectors such as education, child welfare, juvenile justice, and mental health; youth and family caregiver participation; and cultural and linguistic competence of services. The Briefs are published monthly and are sponsored by the Child, Adolescent and Family Branch of the federal Center for Mental Health Services.



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services. This was particularly true for children receiving restrictive services, the majority of whom also received other services in the traditional or innovative service categories.

### Service Mix and Service Use Patterns

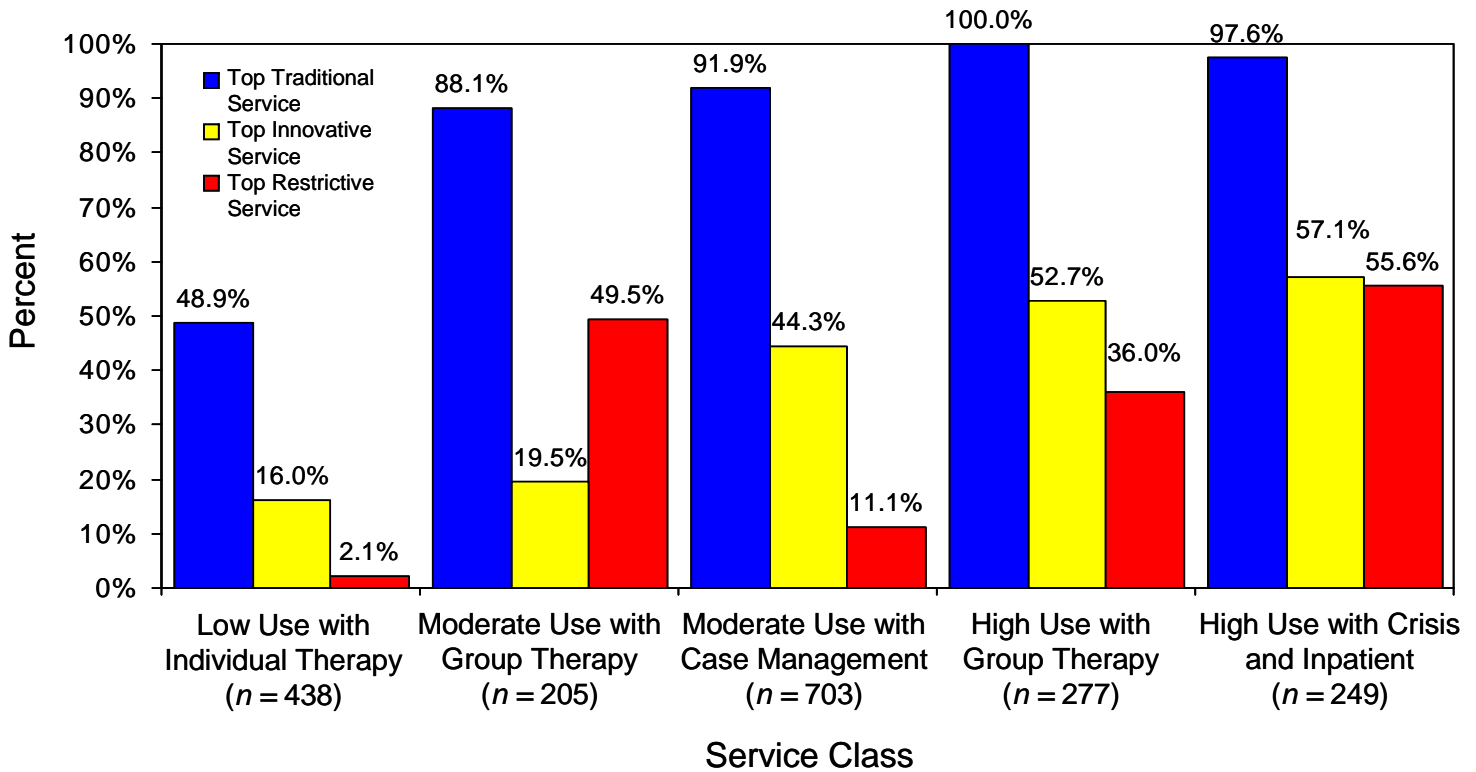
Latent class analysis, a technique for clustering similar individuals into groups or *classes*, was conducted to classify children and families based on their service use patterns. The analysis results generated five classes of children with different service use patterns. Examination of probabilities of service receipt indicated that children and families did have different service use patterns or *service mix*. Table 1 summarizes the service use pattern of each class and highlights the major differences in service use across classes. For example, Class 5 was a high use group, with children and families in that class having a high probability of receiving all types of services. In contrast, Class 1 was a low use group who had a high probability of receiving individual therapy and moderate probabilities of receiving assessment and case management. Probabilities of receiving any other services were fairly low for children in Class 1. Class 2 was a moderate use group with a high probability of receiving group therapy, and Class 3 was a moderate use group with a low probability of receiving group therapy. Patterns of service use for Class 4 were similar to those in Class 5, except that the probabilities of receiving crisis stabilization or inpatient hospitalization were very low for Class 4 compared to Class 5. These differences in service mix among classes are further illustrated in Figure 1, which shows the percentages of the most frequently reported services in each of the three categories (traditional, innovative, and restrictive) for each class. For example, the majority of the children in Class 5 received services in all three categories (98%, 57%, and 57% for traditional, innovative, and restrictive services, respectively). In contrast, the majority of children

**Table 1**  
**Service Mix: Five Classes of Service Use Patterns**

<b>Class 5</b>	<b>High usage group with crisis stabilization and inpatient hospitalization</b> Greater than 50% probability to receive <b>11</b> services, particularly case management, assessment, and medication monitoring. Moderate probabilities of receiving day treatment, behavioral/therapeutic aide, transportation, and flexible funds. <b>High probability to receive crisis stabilization.</b>
<b>Class 4</b>	<b>High usage group without crisis stabilization and inpatient hospitalization</b> Greater than 50% probability to receive <b>7</b> services, particularly group therapy and case management. Moderate probabilities of receiving recreational activities, transportation, flexible funds, and residential services. <b>Very low probability of receiving crisis stabilization. 100% likely to receive group therapy.</b>
<b>Class 3</b>	<b>Moderate usage group without group therapy</b> Greater than 50% probability to receive <b>4</b> services, particularly case management. Moderate probabilities of receiving family therapy, family support service, recreational activities, and flexible funds.
<b>Class 2</b>	<b>Moderate usage group with group therapy</b> Greater than 50% probability to receive <b>5</b> services, particularly individual therapy and assessment. Moderate probability of residential services. <b>Not likely to receive flexible funds at all.</b>
<b>Class 1</b>	<b>Low usage group</b> Greater than 50% probability to receive only <b>1</b> service - individual therapy. Moderate probability to receive assessment. <b>Not likely to receive inpatient hospitalization at all.</b>

Figure 1

Three Most Frequently Reported Services<sup>a</sup> for Each of the Five Service Use Classes



<sup>a</sup>“Most frequently reported service” refers to the top service received in each service category (traditional, innovative, and restrictive) for each service class.

in Class 2 received traditional services (88%) and restrictive services (50%), but not innovative services (only 20%). The relationships between child and family characteristics and service use classes were further explored by using these characteristics as predictors of the service classes. A brief summary highlighting some key differences in child and family characteristics across service classes is provided.

Level of problem behaviors, level of caregiver strain, level of functional impairment, and level of family resources predicted differences in service use class. Children with fewer problem behaviors and whose caregivers reported higher levels of strain were more likely to be in Class 1 (42.6%) and less likely to be in Class 2 (7.9%). However, children with more problem behaviors and whose caregivers reported lower levels of strain were more likely to be in Class 3 (42.2%).

These differences in service use class by child and family characteristics emphasize the importance of the awareness of the impact they can have on the types of services children and families use. The results suggest that systems of care are finding this information to be helpful in assessing the needs of children and their families and in developing care plans. Children with lower levels of problem behaviors and impairment were found to use fewer services. Instead of providing a wide array of services to every child who enters a system of care, service providers in systems of care are assessing needs on an individual basis and providing services accordingly. This seems to assist in allocating a variety of services to the most needy children and families. The only service that the low service use class (Class 1) was the most likely to receive was individual therapy, and this service along with case management may meet needs adequately for children in this class. By carefully assessing the needs of children and families based on their characteristics, systems of care are providing services that meet the diverse needs of the children and families being served.

*Data suggest that providers in systems of care assess the individual needs of the children and families they serve and allocate a variety of services to the most needy children and families.*

Other Volume 4 issues:

- 1 Satisfaction with Services in Systems of Care
- 2 Availability of Service Arrays in Systems of Care

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