


---

# **Children's Intensive Services (CIS) Evaluation Report**

**ANNUAL REPORT FISCAL YEAR 2007**



**The Consultation Center and the  
Division of Prevention and Community Research  
Department of Psychiatry  
Yale University School of Medicine**

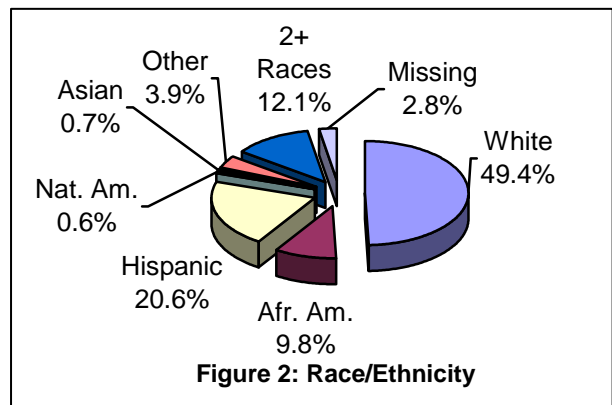
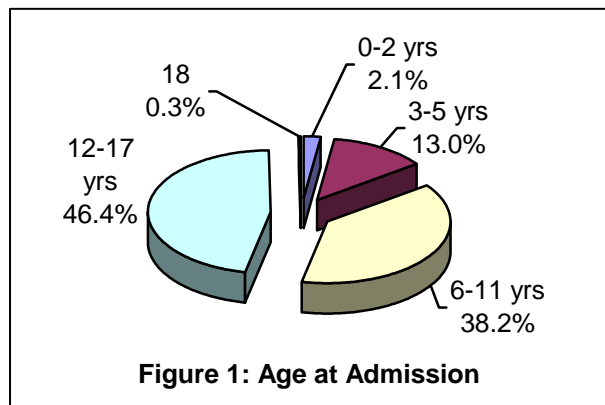
The Consultation Center at Yale University School of Medicine is conducting a statewide evaluation of the implementation of Children's Intensive Services (CIS) – a 6-month acute hospital diversion program that provides community-based services for youth (age 0 to 21) at risk for hospitalization or out-of-home placement. The evaluation examines annual service utilization patterns for CIS clients served statewide through all certified CIS provider agencies. This evaluation report provides annual information on demographic and clinical characteristics of newly admitted children and total population of children served by CIS, as well as information on the amount and types of services provided to children. In addition, this report includes the status of children discharged from CIS and performance indicators tracked by CIS providers. An appendix summarizes data broken down by CIS provider.

Ten agencies provided information for children served by CIS during the 2007 fiscal year (July 1, 2006 – June 30, 2007). These agencies included East Bay Mental Health Center, Family Services of Rhode Island, Kent County Community Mental Health Center, Newport County Mental Health, NRI Community Services, Inc., The Providence Center, South Shore Community Mental Health Center, Gateway Healthcare, Child and Family Services of Newport, and Saint Mary's Home for Children. A total of **2148** children were admitted to CIS programs, **3189** children were served, and **1984** children discharged from CIS programs during the year.

### Profile of New Admissions

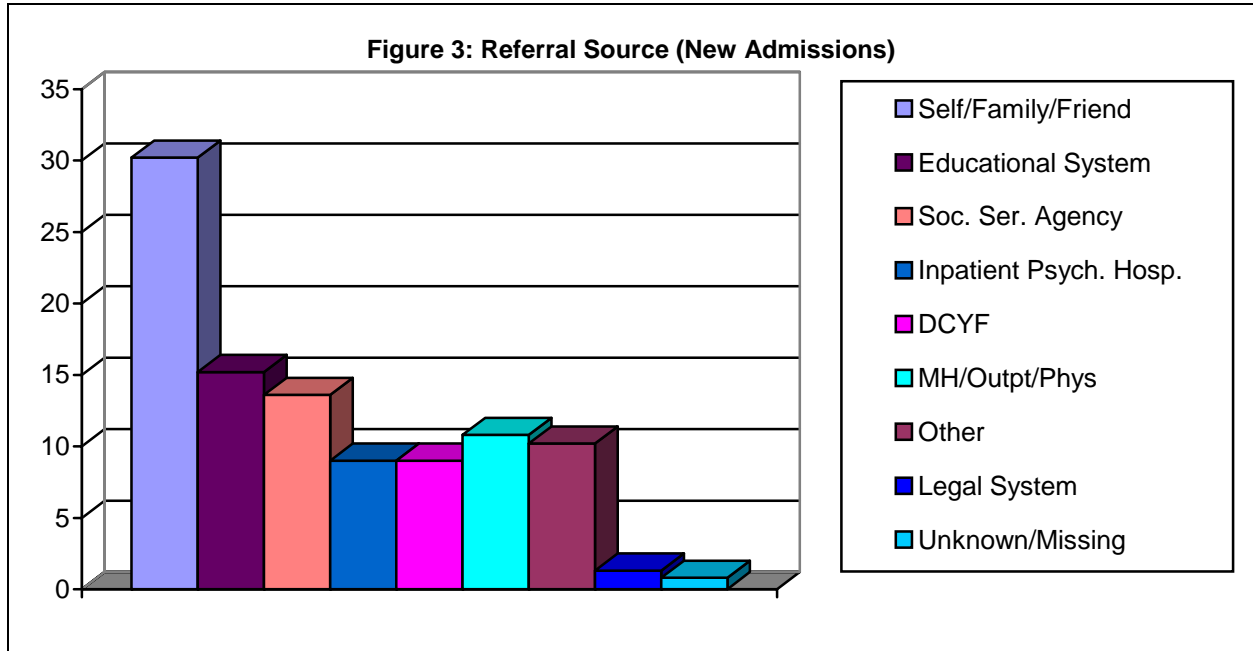
Descriptive information on **2148** children admitted to CIS during the fiscal year 2007 is summarized by center in Appendix A.

**Demographic Characteristics:** Males comprised **60%** of new admissions, statewide. The mean age of children at admission was **11.0** years. Figure 1 provides the age breakdown of children admitted to CIS. Information on race and ethnicity of newly admitted children is indicated in Figure 2. Most of the children admitted to CIS during the fiscal year identified as White (**49%**), Hispanic (**21%**), Biracial/Multiracial (**12%**) or African American (**10%**). Medicaid was indicated as the primary payment source for **51%** of children and as a secondary payment source for **35%** of children. RITE Care was indicated as the primary payment source for **42%** of children and as a secondary payment source for **20%** of children.



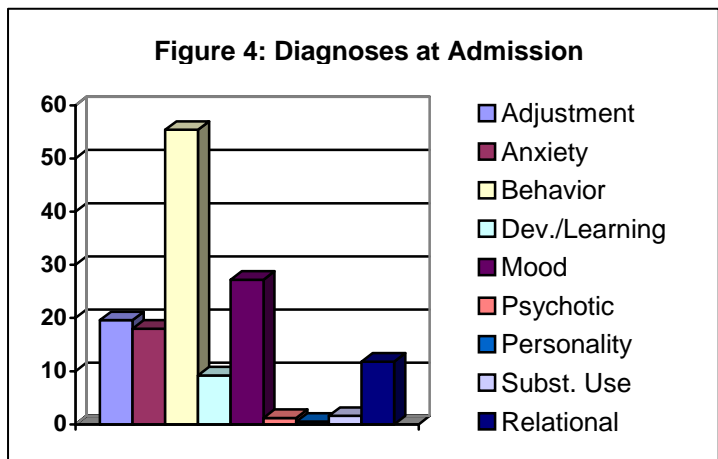
Residential information indicates that at admission, **70%** of children were residing in a private residence, **15%** in subsidized housing, and **7%** in foster care, group home or a residential facility. **One percent** of children were either homeless or in temporary housing.

As shown in Figure 3, children referred by self, family, or friend constituted the largest portion of new admissions for the year (30%), followed by children referred by the educational system (15%) and social service agencies (14%). Children referred by DCYF (intake, direct service, and probation) accounted for 9% of the new admissions. Children referred by inpatient psychiatric facilities (a performance monitoring item) accounted for 9% of new admissions.



**Clinical Information:** Among the 2148 new admissions in 2007, 2 children (0.1%) were admitted at Level 1 (Crisis Management/Stabilization), 18% were admitted at Level 2 (Standard Care), 81% were admitted at Level 3 (Intermediate Care), 29 children (1.4%) were admitted at Level 4 (Maintenance), and data on level of care at admission was missing for 4 children.

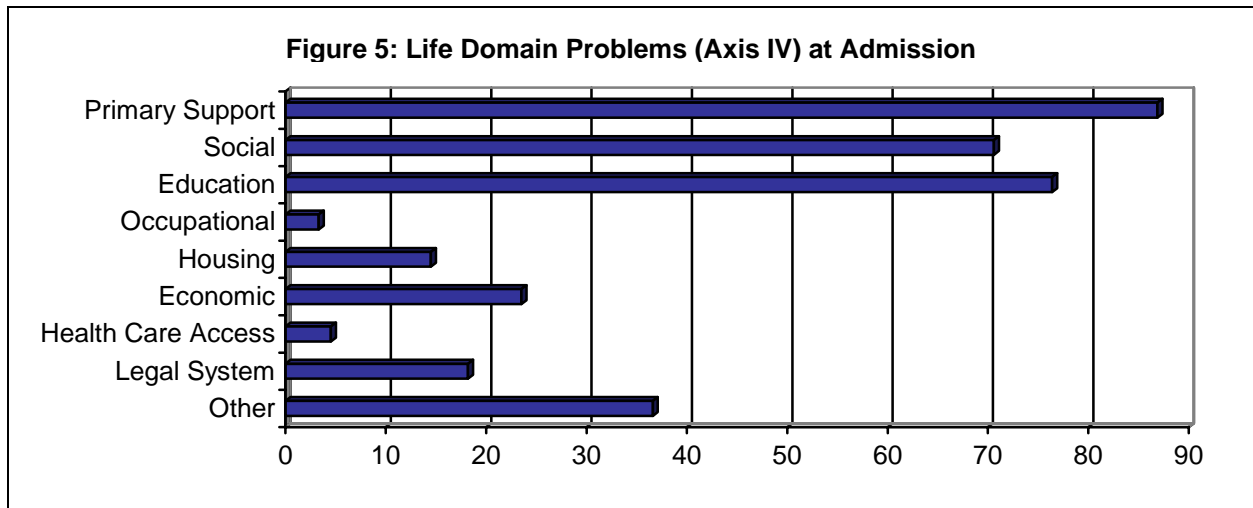
Diagnostic information was provided for new admissions – agencies are able to provide up to three diagnoses for Axis I and two diagnoses for Axis II (diagnostic categories are therefore not mutually exclusive). This diagnostic data is presented in Figure 4 to illustrate the range of psychiatric symptoms indicated in cases admitted to CIS. **Fifty-six percent** of cases were admitted with a diagnosis of behavioral disorder (e.g., conduct disorder, oppositional defiant disorder, ADHD); **27%** of children were admitted with a diagnosis of a mood disorder (e.g., Major Depression, Bipolar Disorder); adjustment disorders (20%), Anxiety disorders (18%), and relationship disorders (e.g., reactive attachment, parent-child relationship problem, maltreatment; 12%) were also frequently diagnosed in newly admitted children. Half of the children (50%)



Half of the children (50%) were also frequently diagnosed in newly admitted children.

presented with diagnoses in a single category, **34%** presented with disorders in two diagnostic categories, and a small number of children (**10%**) presented in three or four diagnostic categories. Diagnostic information was missing, deferred, or did not fit the above categories for **6%** of children.

In addition, agencies provided information on problems the child and/or family was experiencing in a number of life domains as captured in Axis IV of the DSM-IV (see Figure 5). **Eighty-seven** percent of children were experiencing problems within their primary support group, **76%** of children were experiencing problems within educational settings, and **71%** of children were experiencing problems within their social environment. A substantial number of children were experiencing economic, housing, or legal problems.



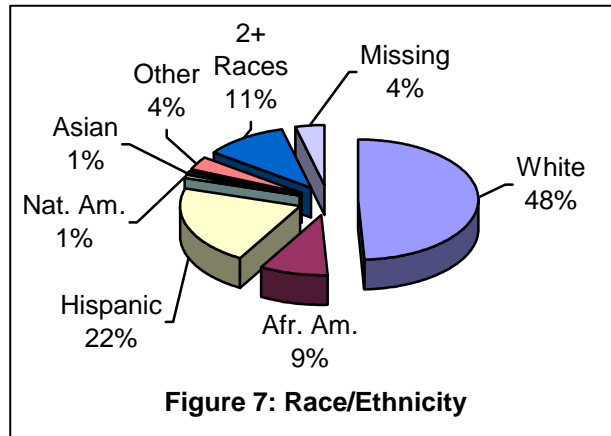
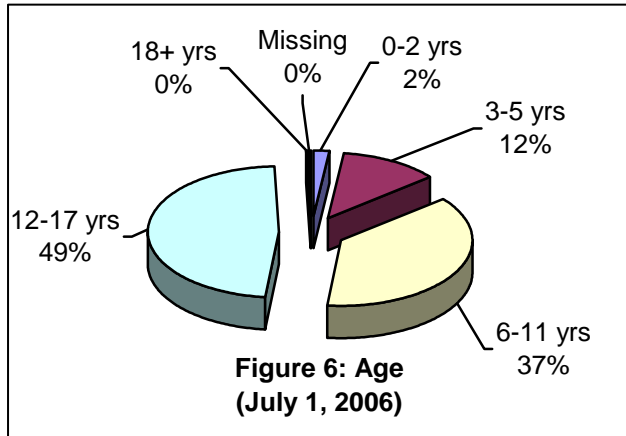
Only **8%** of children were indicated as having had a psychiatric hospitalization during the 90-day period prior to CIS admission; however, this information is missing or unknown for **13%** of children. Recall that **9%** of cases were referred to CIS through inpatient psychiatric facilities.

The Modified Children's Global Assessment Scale (M-CGAS) is one indicator of clinical functioning used to determine Level of Care with CIS; appropriate ranges are outlined in the Standards for CIS Providers (RI DCYF, 2003). The mean M-CGAS score for new admissions was **43**. A comparison of admission M-CGAS scores and CIS Level at admission indicates that **68%** of children were admitted to a level of care consistent with M-CGAS scores, with **15%** entering at a less intensive CIS Level than indicated based upon M-CGAS Scores, and **5%** at a more intensive CIS Level. M-CGAS data was missing for **11%** of cases.

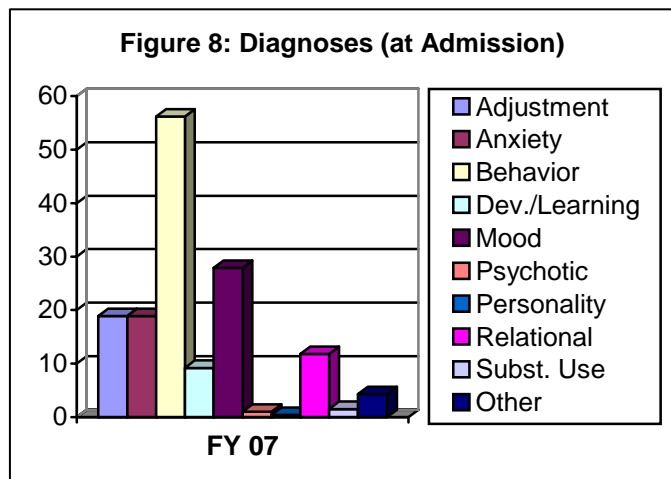
### Profile of Total Population Served

A total of 3189 children were active during the year after eliminating cases with no service data submitted for at least 1 month prior to the start of the fiscal year. Descriptive information for all the children served by CIS in FY07 is summarized by center in Appendix B.

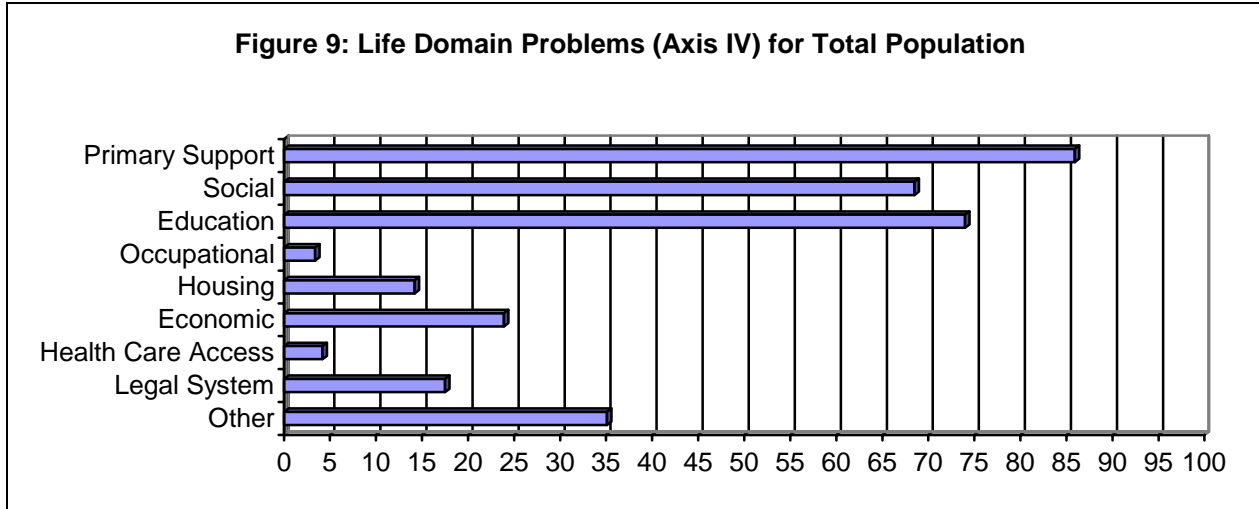
**Demographic Characteristics:** Over half (**60%**) of children receiving CIS in FY07 were males. The mean age of children receiving CIS services was approximately **11.2** years old as of July 1, 2006 (or at admission, if later). Figure 6 provides information on the age breakdown of children. Information on race and ethnicity of children is indicated in Figure 7.



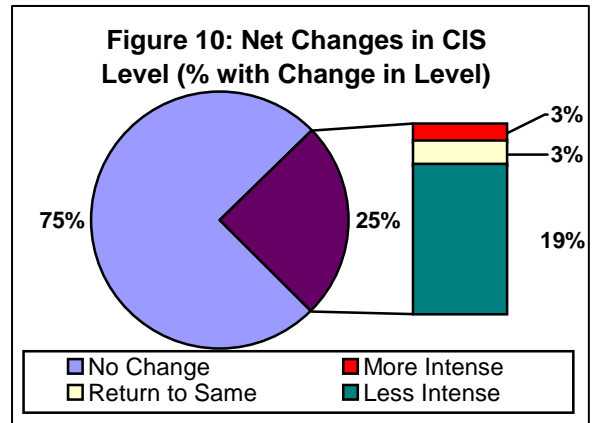
**Clinical Information:** Diagnostic information for all children served in FY07 is provided in Figure 8. Approximately **56%** of children were diagnosed with a behavioral disorder (e.g., conduct disorder, oppositional defiant disorder, ADHD); **28%** were diagnosed with a mood disorder (e.g., Major Depression, Bipolar Disorder); anxiety disorders (**19%**), adjustment disorders (**19%**), and relationship disorders (e.g., reactive attachment, parent-child relationship problem, maltreatment; **12%**) were also indicated for a significant number of children served. Half of children (**50%**) presented with diagnoses in a single category, **35%** presented with disorders in two diagnostic categories, and a small number of children (**10%**) presented in three or four diagnostic categories. Diagnostic information was missing, deferred, or did not fit the above categories for **6%** of cases.



In addition, agencies provided information on problems present in a number of domains within the child’s life as captured in Axis IV of the DSM-IV (see Figure 9). **Eighty-six percent** of children exhibited problems in their primary support group, **74%** experienced problems in their educational settings and **69%** in their social environment. A significant number of children served in FY07 faced economic, housing, or legal problems.



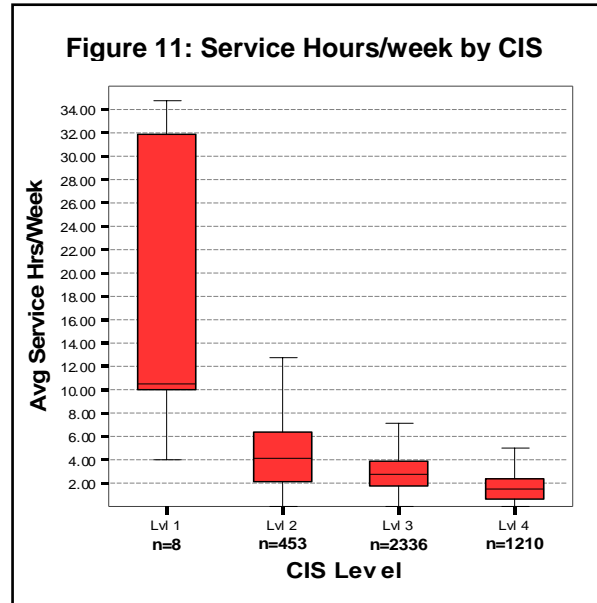
CIS providers submit information on changes in CIS Level during each CIS episode. Although most active clients during the fiscal year did not change levels (75%), 1202 level changes were recorded for 787 clients (25%) – 530 clients had one level change, 155 clients had two level changes, 70 clients had three level changes and 22 clients had four or more level changes during the fiscal year. Figure 10 depicts the net level changes resulting from all changes during the fiscal year. Most of these level changes involved a shift toward less intensive service needs.



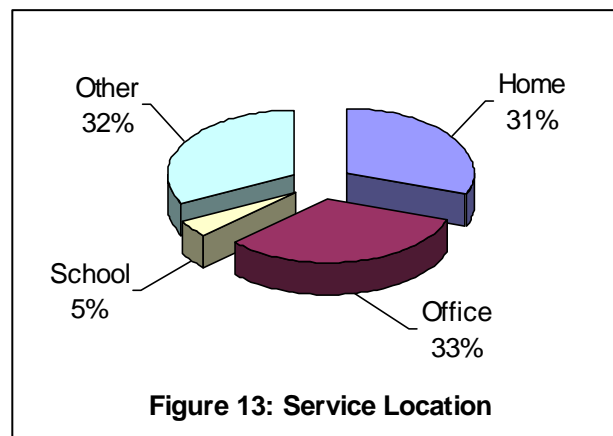
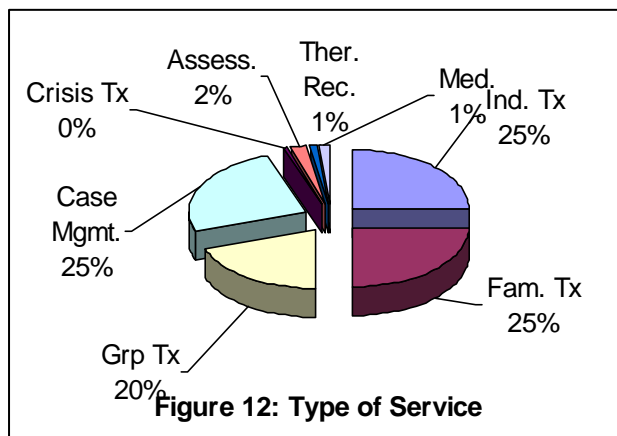
Finally, CIS providers indicated that 126 active CIS clients (4%) entered a psychiatric hospital facility at some point during FY07. Data on this data element was missing for a significant portion of the total population (32%); it is not clear whether missing data indicates that clients did not experience such a placement, or if this information was not known to the CIS provider agency at the time of the data submission. Among cases that experienced a psychiatric hospitalization during the fiscal year, the mean amount of time spent in the hospital was 20 days (median = 12 days).

**Service Delivery Pattern (Total Population)**

Information on the service delivery pattern for all children served by CIS in FY07 is summarized by center in Appendix C. Figure 11 breaks down rates of service delivery by CIS Level<sup>1</sup>. Eight children were served at Crisis Management (Level 1) with a median average of **10.5** hours of service per week. The range for Level 1 was particularly broad as a result of one case that remained at the level for a very brief period (3 days) prior to hospitalization but received very intensive services during that period. Children in Standard Care (Level 2) received a median average of **4.2** hours of service per week, and Intermediate Care (Level 3) each received a median average of **2.8** hours of service per week. Children in Maintenance Care (Level 4) received a median average of **1.5** hours of service per week.

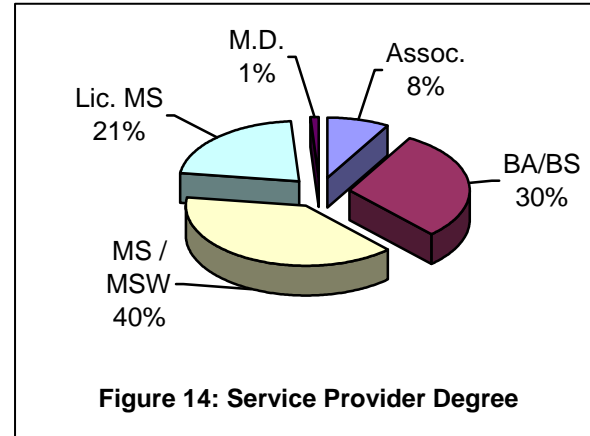


CIS providers indicated the type of service clients received during each CIS encounter for the fiscal year. Agency billing codes were re-coded to maintain consistency of service type definitions across providers. Statewide data indicates that individual therapy, family therapy and case management services each represent approximately **25%** of services delivered in FY07, followed by group therapy sessions (**20%**) – other types of services can be found in Figure 12. Table J (see Appendix C) summarizes information on the type of service by CIS Level of Care. Less than one-third (**31%**) of services took place in the home, while **33%** of services took place in the office. Very few services (**5%**) were carried out in the schools. The remaining service time (**32%**) took place in other unspecified locations (see Figure 13).



<sup>1</sup> Outliers and extreme values for CIS Service are excluded from the figure, but were included in analyses of overall service delivery.

Finally, agencies reported the educational degree of the providers delivering services to CIS clients. Statewide, Masters- Level clinicians provided **39%** of services in the fiscal year, followed by providers with a Bachelors or Associates degree (**36%**). Licensed Masters-Level clinicians delivered **22%** of services, while M.D. providers delivered approximately **1%** of services (see Figure 14). Registered Nurses and Doctoral-level clinicians provided less than **1%** of services each. Table K (see Appendix C) summarizes information on the provider degree by CIS Level of Care.



### Profile of Discharged Clients

Information on the discharge status and clinical functioning of children discharged from CIS during the Fiscal Year 2007 is summarized by center in Appendix D. A total of **1984** children were discharged from CIS during the year. **Fifty percent** of children were discharged from Level 3 (Intermediate Care), and **45%** were discharged from Level 4 (Maintenance). Very few children were discharged from higher levels of clinical care (**4%** from Standard Care and **1 child (.1%)** from Crisis Management). Data was missing for approximately **1%** of cases. Approximately **50%** of children were discharged from CIS at their admission level, **46%** of children were discharged from a less intensive level of care than initially admitted. Only **2%** discharged at a more intensive level. Data (either an admission or discharge CIS level) for was missing for approximately **2%** of cases.

Median length of stay for children who were discharged from CIS during the year was approximately **5.5 months (164 days)** – though this figure includes children who were involved in CIS prior to the implementation of new standards and excludes children who remain active in CIS through the end of the year.

Data on several clinical instruments is collected when a child is discharged from CIS. The mean M-CGAS score for all discharges was **47.6**. M-CGAS scores show moderate correspondence with discharge level of care, though there is a fair degree of variability and overlap in scores. In general, cases improved an average of 5 points on the M-CGAS from admission to discharge, with slightly greater improvements observed among cases discharged at Level 4 (Maintenance) than at more intensive levels of service.

Reasons for discharge from CIS are indicated in Figure 15. Approximately **38%** of children successfully completed the CIS program and were discharged because their clinical goals were met. Data was missing or unknown for **6%** of children discharged from care.

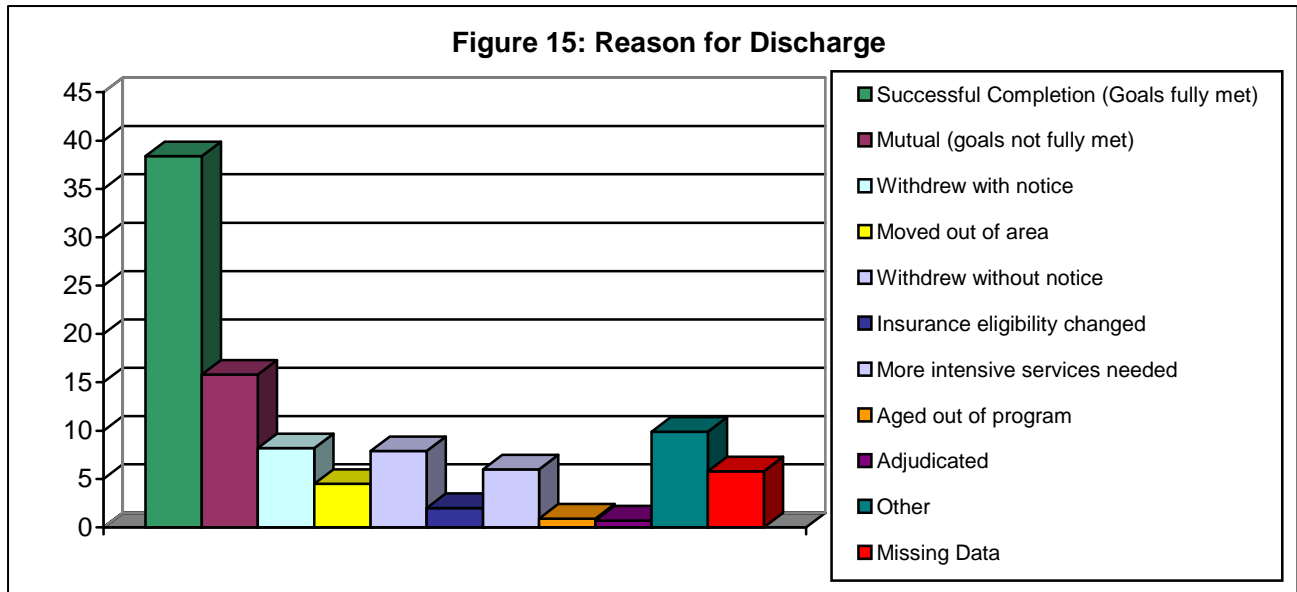


Figure 16 shows post-discharge mental health services to which child and family are referred. Upon discharge, **24%** of clients had no follow-up services recommended, while **15%** declined the recommended follow-up services. For those clients who received follow-up services, **15%** of clients were referred to outpatient medication only services, **12%** to outpatient therapy only, **156%** to a combination of outpatient and medication, **6%** to another CIS or other intensive program, and **4%** to a residential, partial hospitalization, or inpatient hospitalization program.

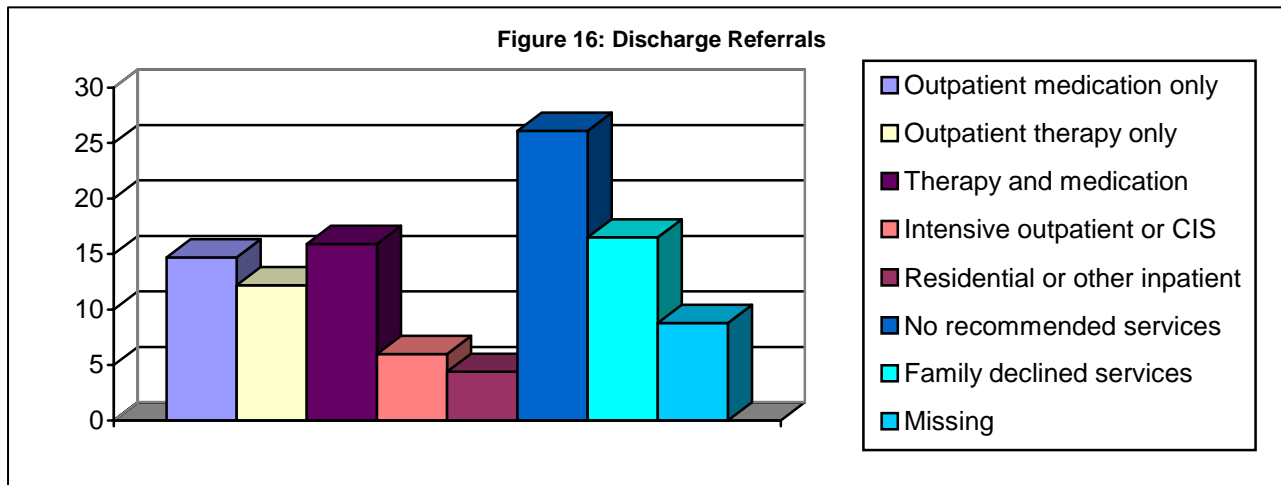
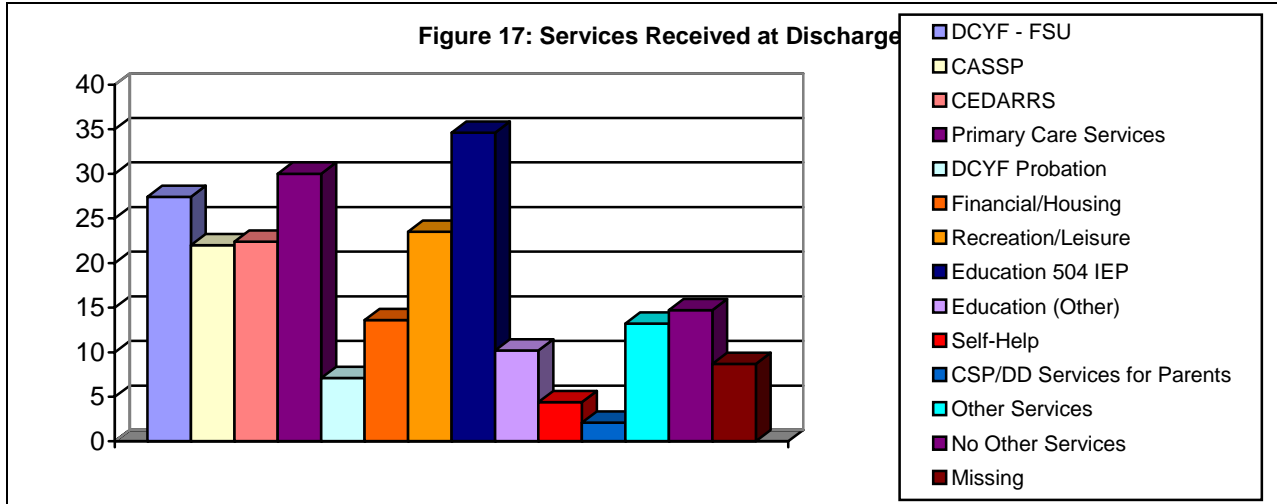


Figure 17 provides information on additional services, if any, the client is actively receiving at the time of discharge. The mean number of additional services being received at discharge was **2.3**. Approximately **15%** of clients had no other services in place at the end of CIS services, **35%** were receiving educational 504 IEP services, **30%** were receiving primary care or other medical services, **27%** were receiving DCYF-FSU services, **22%** were receiving CASSP services, and **22%** were receiving CEDDARRS services. Data on additional services was missing for **9%** of children discharged from care.



Placement of the child at the time of discharge is provided in Figure 18. Approximately **80%** of children were discharged to a parent or relative. A total of **5%** were discharged to a group home, shelter, or residential facility; **5%** of children were discharged to DCYF or Specialized Foster Care. Approximately **1%** of children were discharged to a psychiatric facility, and less than **1%** were discharged to live independently or to the RITS. Data was missing or unknown for **7%** of children.

