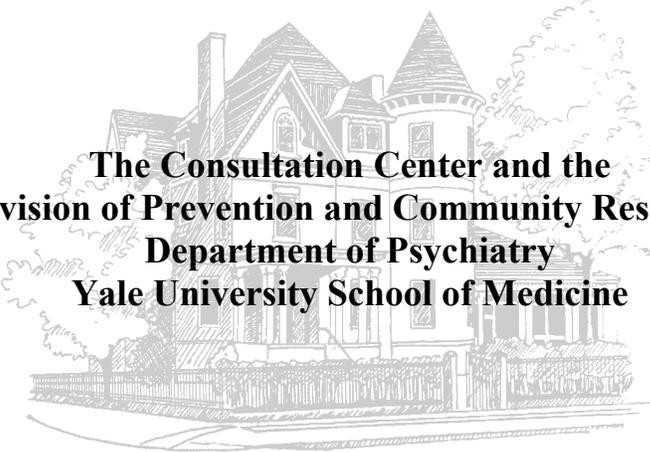

Children's Intensive Services (CIS) Evaluation Report

QUARTER 1 FY 2006: JULY-SEPTEMBER DATA



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

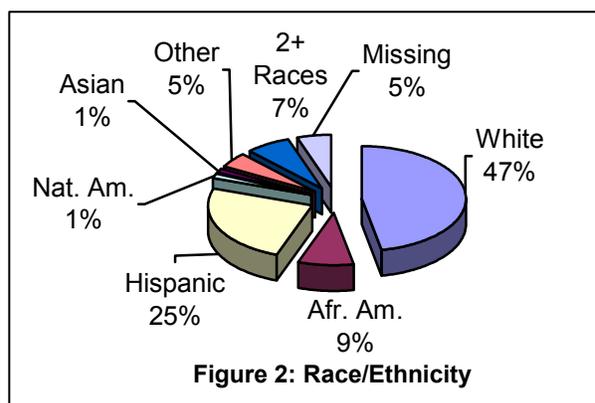
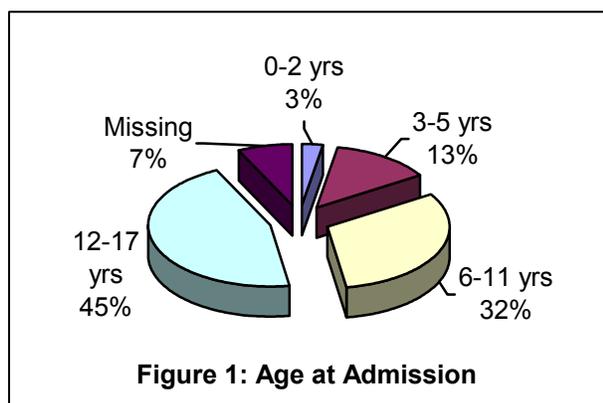
The Consultation Center at Yale University School of Medicine is conducting a statewide evaluation of the implementation of Children's Intensive Services (CIS) – a 6-month acute hospital diversion program that provides community-based services for youth (age 0 to 21) at risk for hospitalization or out-of-home placement. The evaluation examines quarterly service utilization patterns for CIS clients served statewide through all certified CIS provider agencies. This evaluation report provides quarterly 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.

Nine agencies provided information for children served by CIS during the first quarter of the 2006 fiscal year (July – September, 2005). These agencies included Child and Family Services of Newport, East Bay Mental Health Center, Family Services of Rhode Island, Gateway Healthcare, Inc., the Kent Center, Newport County Mental Health, NRI Community Services, Inc., the Providence Center, and South Shore Community Mental Health Center. A total of **447** children were admitted to CIS programs, **1440** children were served, and **433** children discharged from CIS programs during the quarter.

Profile of New Admissions

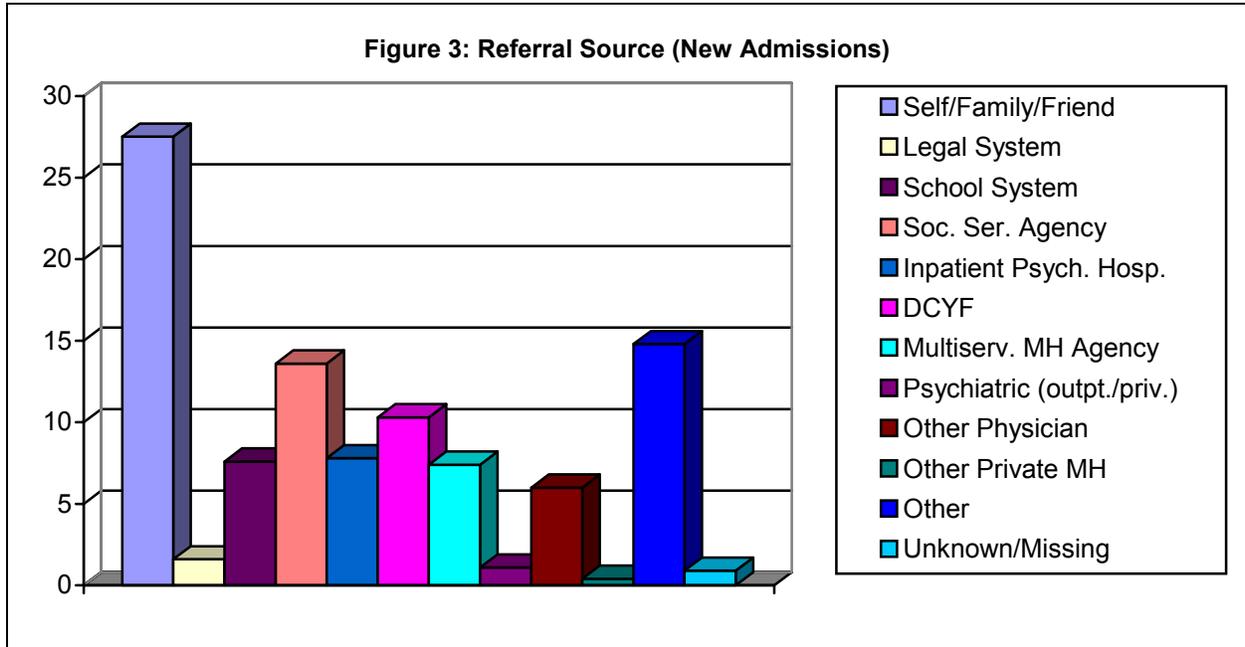
Descriptive information on **447** children admitted to CIS during the first quarter of fiscal year 2006 is summarized by center in Appendix A.

Demographic Characteristics: Males comprised **55%** of new admissions, statewide. The mean age of children at admission was **10.9** 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 quarter identified as White (**47%**), Hispanic (**25%**), or African American (**9%**). Medicaid was indicated as the primary payment source for **52%** of children and as a secondary payment source for **49%** of children. RITE Care was indicated as the primary payment source for **42%** of children and as a secondary payment source for **18%** of children.



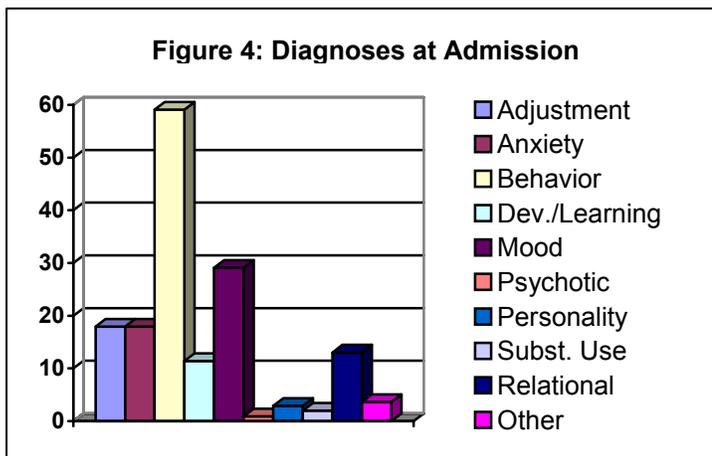
Residential information indicates that at admission, **72%** of children were residing in a private residence, **14%** in subsidized housing, and **8%** in foster care, group home or a residential facility. **Three percent** of children were either homeless or in temporary housing.

As shown in Figure 3, children referred by self, family, or friend constituted the largest portion of new admissions for the quarter (**28%**), followed by children referred by social service agencies (**14%**). Children referred by DCYF (intake, direct service, and probation) accounted for **10%** of the Quarter 1 new admissions. Children referred by inpatient psychiatric facilities (a performance monitoring item) accounted for **8%** of new admissions.



Clinical Information: Among the **447** new admissions in Quarter 1, **1** child (**0.2%**) was admitted at Level 1 (Crisis Management/Stabilization), **15%** were admitted at Level 2 (Standard Care), **83%** were admitted at Level 3 (Intermediate Care), and **3** children (**1%**) were admitted at Level 4 (Maintenance). Level was missing for **3** children.

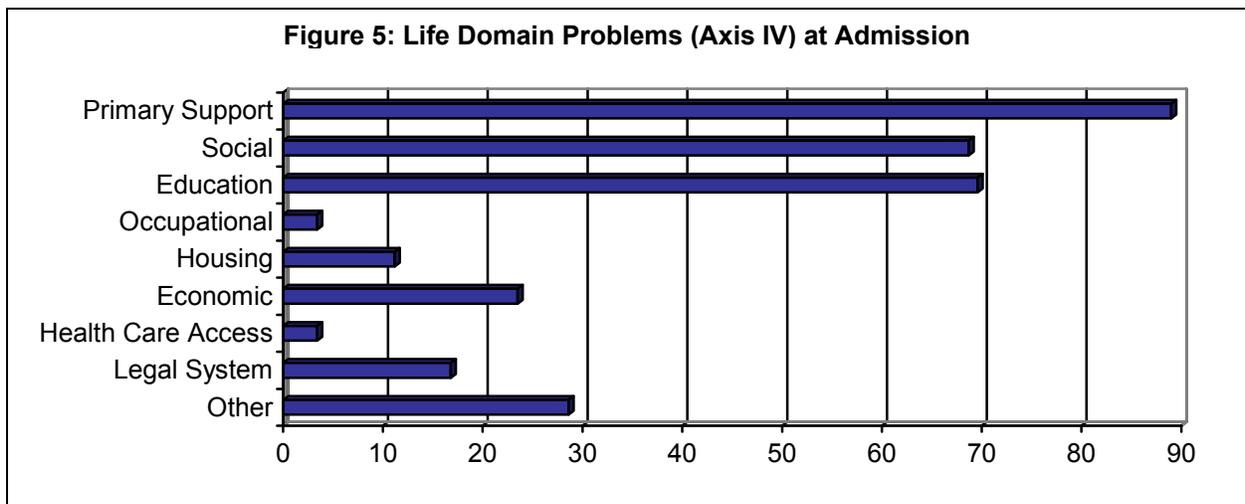
Diagnostic information was provided for new admissions – agencies are able to provide up to three diagnoses for Axis I and two diagnoses for Axis II (diagnostic categories are therefore not mutually exclusive). This diagnostic data is presented in Figure 4 to illustrate the range of psychiatric symptoms indicated in cases admitted to CIS. **Fifty-nine percent** of cases were admitted with a diagnosis of behavioral disorder (e.g., conduct disorder, oppositional defiant disorder, ADHD); **29%** of children were admitted with a diagnosis of a mood disorder (e.g., Major Depression, Bipolar Disorder); Anxiety disorders (**18%**), adjustment disorders (**18%**), and early relationship disorders (e.g., reactive attachment, parent-child relationship problem, maltreatment; **13%**) were also frequently diagnosed in newly admitted children. About half of the children



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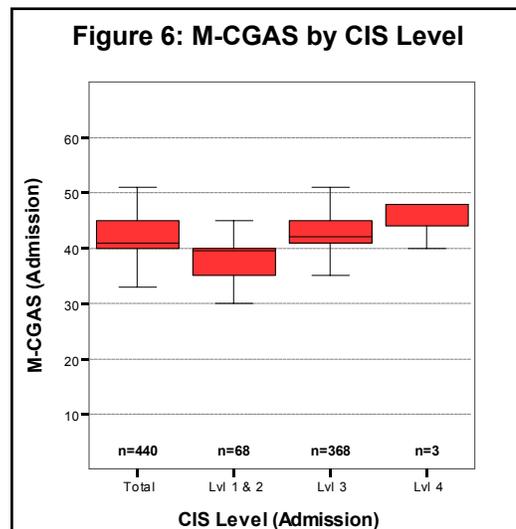
(45%) presented with diagnoses in a single category, 36% presented with disorders in two diagnostic categories, and a small number of children (11%) presented in three or four diagnostic categories. Diagnostic information was missing, deferred, or did not fit the above categories for 5% of children.

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-nine** percent of children were experiencing problems within their primary support group, **70%** of children were experiencing problems within educational settings, and **69%** of children were experiencing problems within their social environment. A substantial number of children were experiencing economic, housing, or legal problems.



Only 6% 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 8% of cases were referred to CIS through inpatient psychiatric facilities.

Figure 6 provides information on Modified Children’s Global Assessment Scale (M-CGAS) scores for children by CIS Level at the time of admission. The mean M-CGAS score for all new admissions was 41.7. The red box represents 50% of the M-CGAS scores for each level, and the line through the box represents the median M-CGAS score for each level. The “whiskers” coming off of each box represent the range of scores falling within a normal distribution. M-CGAS scores correspond well with CIS Levels, although there is some variability and overlap in M-CGAS scores across CIS Levels at admission. It is important to note that the number of children in each category varied widely – because of low numbers, Level 1 (Crisis) was combined with Level 2 (Standard). Children with missing CGAS information were not included in the figure.



Data from the Ohio Scales was collected for all children 5 years of age or older upon admission to provide an indication of problem severity and child adaptive functioning. The mean score for

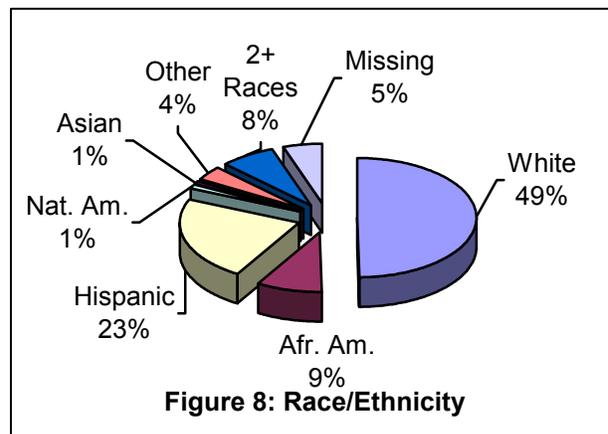
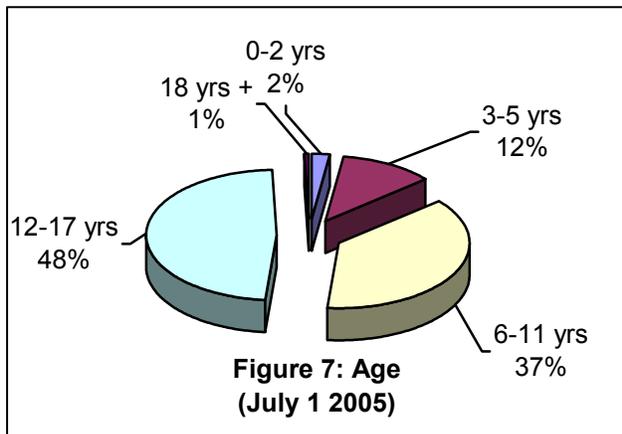
the Problem Severity Index was **33.8**, and the mean score for the Functioning Index was **38.4**; both scores suggest a need for supportive and clinical services in beyond those provided through outpatient treatment. A total of **79%** of children demonstrated need for additional services on the Problem Severity Index, and **74%** of children demonstrated need for additional services on the Functioning Index. Ohio Scale data was missing for approximately **10%** of eligible cases; missing data includes cases in which 0 was indicated for both Problem Severity and Functioning Index scores.

CAFAS data was also collected at the time of admission. These data will be presented in a separate report.

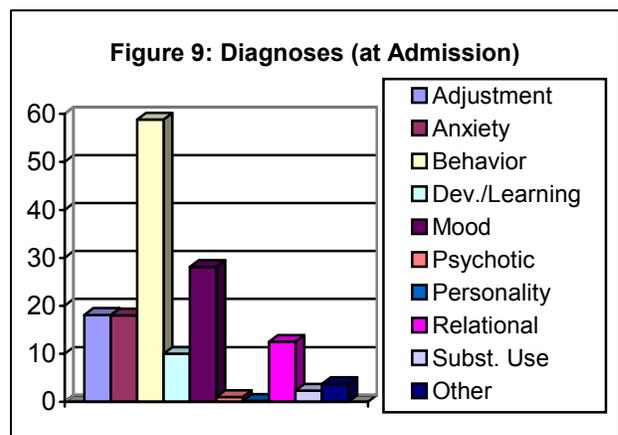
Profile of Total Population Served

A total of **1440** children were active during the quarter after eliminating cases with no service data submitted for at least 1 month prior to the start of the quarter. Descriptive information for the all children served by CIS in Quarter 1 is summarized by center in Appendix B.

Demographic Characteristics: Over half (**57%**) of children receiving CIS in Quarter 1 were males. The mean age of children receiving CIS services was approximately **11.2** years old as of July 1, 2005. Figure 7 provides information on the age breakdown of children. Information on race and ethnicity of children is indicated in Figure 8.

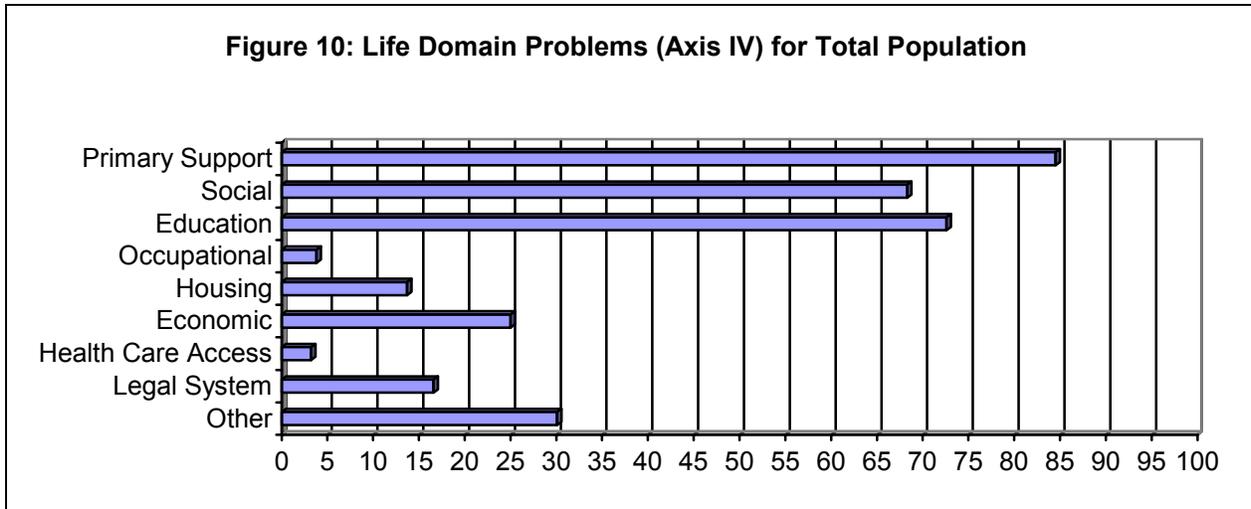


Clinical Information: Diagnostic information or all children served in Quarter 1 is provided in Figure 9. Approximately **59%** of children were diagnosed with a behavioral disorder (e.g., conduct disorder, oppositional defiant disorder, ADHD); **28%** were diagnosed with a mood disorder (e.g., Major Depression, Bipolar Disorder); Adjustment disorders (**18%**), anxiety disorders (**18%**), and early relationship disorders (e.g., reactive attachment, parent-child relationship problem, maltreatment; **12%**) were also indicated for a significant number of children served. Less than half of children (**43%**) presented with diagnoses in a single category, **37%** presented with disorders in two

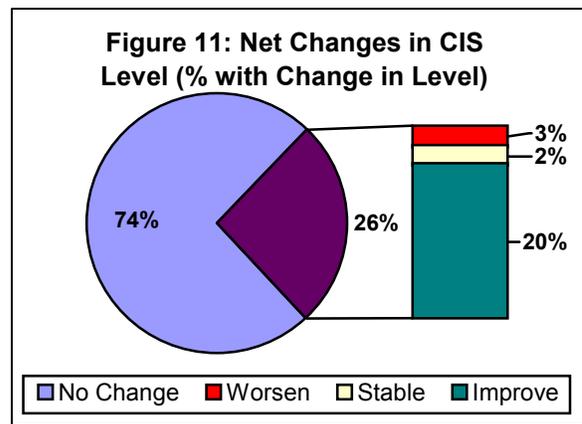


diagnostic categories, and a small number of children (12%) presented in three or four diagnostic categories. Diagnostic information was missing, deferred, or did not fit the above categories for 3% of cases.

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 10). Approximately 84% of children exhibited problems in their primary support group, 73% experienced problems in their educational settings and 68% in their social environment. A significant number of children served in Quarter 1 faced economic, housing, or legal problems.



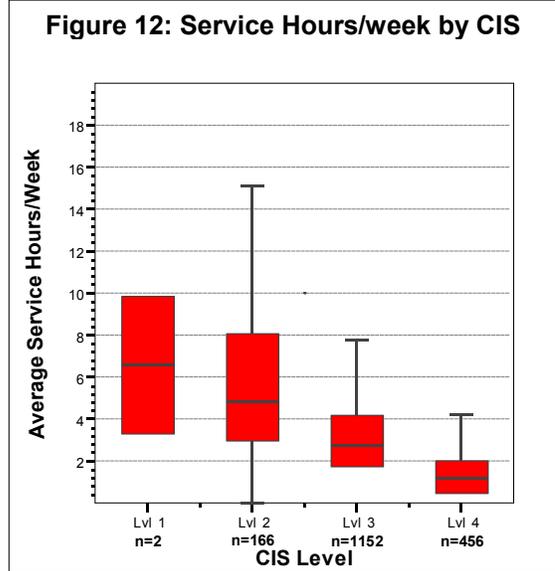
CIS providers submit information on changes in CIS Level during each CIS episode. Although most clients active during the quarter did not change levels (74%), 434 level changes were recorded for 372 clients (26%) – 318 clients had one level change, 47 clients had two level changes, and 7 clients had three or more level changes during the quarter. Figure 11 depicts the net level changes resulting from all changes during the quarter. Most of these level changes involved a shift toward less intensive service needs.



Finally, CIS providers indicated that 36 active CIS clients (2.5%) entered a psychiatric hospital facility at some point during the Quarter 1 period (4 children had more than one entry). Data on this data element was missing for a significant portion of the total population (30%); 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 entered a psychiatric hospital, the mean amount of time spent in the hospital during the quarter was 15 days (median = 11 days).

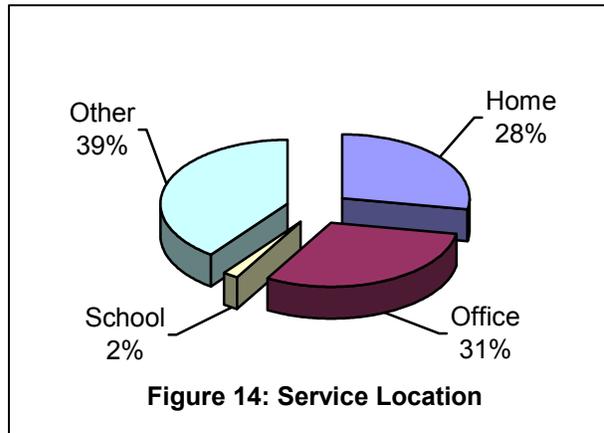
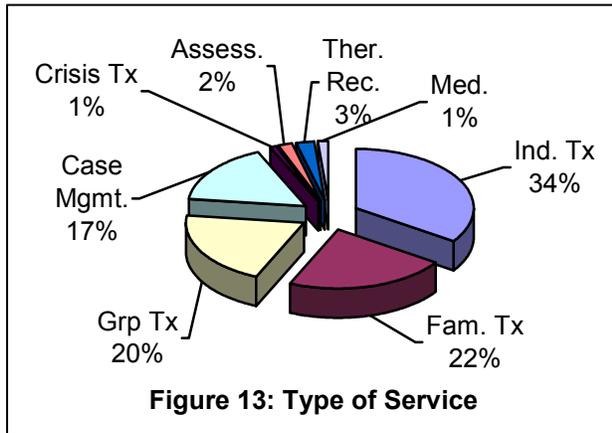
Service Delivery Pattern (Total Population)

Information on the service delivery pattern for all children served by CIS in Quarter 1 is summarized by center in Appendix C. Figure 12 breaks down rates of service delivery by CIS Level¹. Only 2 children were served at Level 1 (Crisis Management) – the median hours of service per week for children at this level was 6.6 hours. Children in Standard (Level 2) received a median average of 4.9 hours of service per week, and Intermediate (Level 3) care each received a median average of 2.8 hours of service per week. Children in Maintenance (Level 4) care received a median average of 1.2 hours of service per week.



CIS providers indicated the type of service clients received during each CIS encounter for the quarter. Agency billing codes were re-coded to maintain consistency of service type definitions across providers.

Statewide data indicates that individual therapy represents approximately 34% of services delivered in Quarter 1, followed by family therapy sessions (22%), group therapy sessions (20%), and case management services (17%) – other types of services can be found in Figure 13. Table J (see Appendix C) summarizes information on the type of service by CIS Level of Care. Over one quarter (28%) of services took place in the home, while 31% of services took place in the office. Very few services (2%) were carried out in the schools – though this quarter summarizes data for much of the summer period. The remaining service time (39%) took place in unspecified locations (see Figure 14).



Finally, agencies reported the educational degree of the providers delivering services to CIS clients. Statewide, Masters- Level clinicians provided 41% of services in the quarter, followed by providers with a Bachelors or Associates degree (33%). Licensed Masters-Level clinicians delivered 24% of services, while M.D. providers delivered approximately 2% of services (see

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

Figure 15). 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 Quarter 1 of Fiscal Year 2006 is summarized by center in Appendix D. A total of **433** children (unduplicated count) were

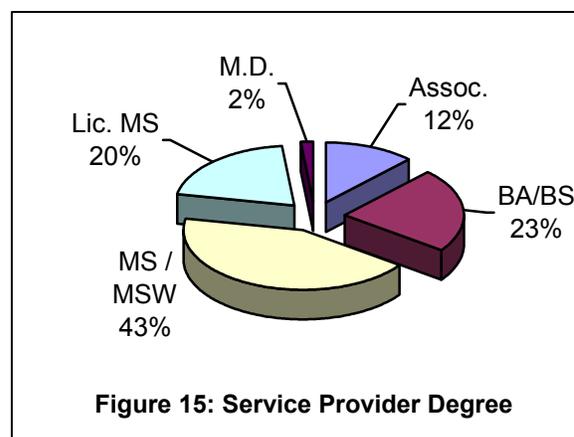


Figure 15: Service Provider Degree

discharged from CIS during the quarter. Approximately **49%** of children were discharged from Level 3 (Intermediate Care), and **37%** were discharged from Level 4 (Maintenance). Very few children were discharged from higher levels of clinical care (**0%** from Crisis Management; **5%** from Standard Care). Approximately **42%** of children were discharged from CIS at their admission level, **56%** 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 **12%** of cases.

Median length of stay for children who were discharged from CIS during the quarter was approximately **4.9** months (**148.0** 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 quarter. Longitudinal analyses of length of stay for all children entering CIS since implementation of new standards suggest that median length of stay in the program is approximately 6 months.

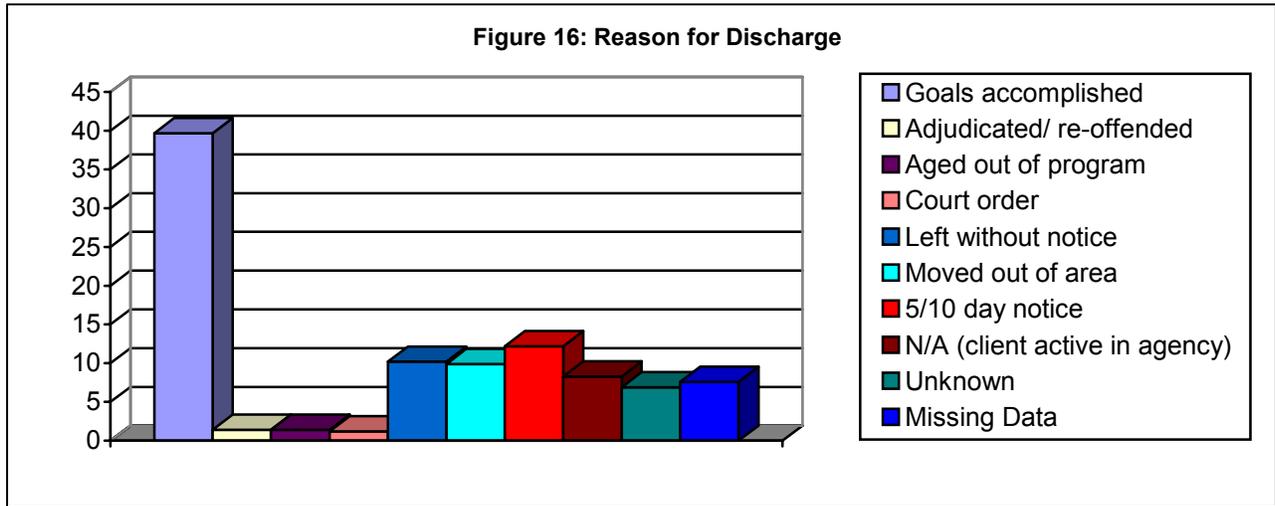
Data on several clinical instruments is collected when a child is discharged from CIS. The mean M-CGAS score for all discharges was **45.4**. M-CGAS scores show moderate correspondence with discharge level of care, though there is a fair degree of variability and overlap in scores. In general, cases discharged at lower levels of service intensity had higher ratings on the M-CGAS, and overall ratings on the M-CGAS were slightly higher (approximately 5 points) at discharge than at admission.

Data from the Ohio Scales was also collected upon discharge to provide an indication of problem severity and child adaptive functioning. The mean score for the Problem Severity Index was **29.1**, and the mean score for the Functioning Index was **39.9**; the average problem severity score suggests the potential need for supportive and clinical services in beyond those provided through outpatient treatment. Approximately **51%** of children demonstrated a need for additional services on the Problem Severity Index, and **56%** demonstrated a need for additional services on the Functioning Index; however, Ohio Scale data was missing for **27%** of children.

CAFAS data was also collected at the time of discharge. These data will be presented in a separate report.

Reasons for discharge from CIS are indicated in Figure 16. Approximately **40%** of children were discharged because their clinical goals were accomplished. Data was missing or unknown for **14%** of children discharged from care, and reasons for discharge were reported as “not

applicable, client remains active” for **8%** of children discharged from care. At present, it is assumed that such cases remain active in outpatient treatment within the providing agency.



Discharge placement was also reported by CIS providers (Figure 17). Approximately **49%** of children were discharged to a parent or relative. A total of **5%** were discharged to a group home, shelter, or residential facility; **3%** of children were discharged to DCYF or Specialized Foster Care. Approximately **2%** of children were discharged to a psychiatric facility. Approximately **4%** of cases were discharged to adult corrections and **1%** were discharged to the RITS. Data was missing or unknown for a significant percentage of children (**14%**), and placement information was indicated as “not applicable” for **6%** of children.

