DOES THE SQUEAKY WHEEL GET THE GREASE? THERAPY TARGETS FOR YOUTH WITH COMORBID INTERNALIZING AND EXTERNALIZING DIAGNOSES

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ABSTRACT

Categorizing many youth mental health problems into internalizing and externalizing domains has been common in children's mental health since Achenbach's first factor analysis in 1966. While much work has been done to understand these dimensions of developmental psychopathology, very little is known about how these two sets of problems are addressed in community-based treatment-as-usual (TAU), particularly in youth with multiple challenges or disorders. Given that many thousands of youth across the country receive TAU through various community-based systems of care, and that several studies have questioned the quality of such services compared to best practice psychotherapy models, it is important to identify potential deficiencies in TAU. At the treatment access level, there is some evidence that children with externalizing problems are referred for care at a disproportionately higher rate than children with internalizing problems. Such a tendency, which suggests that usual care mental health treatment for youth might be more focused on addressing externalizing rather than internalizing pathology, might also be manifested in the behavior of therapists when targeting problems to treat, particularly in youth with comorbid internalizing and externalizing problems. To examine this tendency, the present study compared therapist treatment target choices for youth with both externalizing and internalizing disorders to those for youth with externalizing-only or internalizing-only diagnoses.

Therapist-reported treatment targets for youth (N=679) with (1) one or more internalizing-only diagnoses (n=195); (2) one or more externalizing-only diagnoses (n=314); (3) a primary internalizing diagnosis and at least one additional externalizing diagnosis (n=75); and (4) a primary externalizing diagnosis and at least one additional

internalizing diagnosis (*n*=95) receiving intensive in-home (IIH) services from the State of Hawai‘i, Child and Adolescent Mental Health Division (CAMHD) were examined. Treatment targets significantly related to externalizing-only and internalizing-only diagnoses were determined via Mann-Whitney nonparametric tests, and a derived measure of these targets was analyzed across the four diagnostic groups via contrast-coded ANOVA and ANCOVA, the latter controlling for potential effects of additional client, therapist, and treatment characteristics. As hypothesized, the addition of an externalizing diagnosis to a primary internalizing diagnosis resulted in a significantly larger change in targets selected for treatment compared to the change in treatment targets when an internalizing diagnosis was added to a primary externalizing diagnosis. These findings suggest that therapists tend to prioritize externalizing problems during treatment, even after internalizing problems have been identified via formal diagnosis. Factors that contribute to these decisions are unclear, but might involve a greater salience of externalizing behaviors, difficulties inherent in targeting and treating internalizing problems, and carry-over effects of the disproportionate focus on externalizing problems in the referral process. Future directions include a follow-up study examining whether treatment outcomes differ as a result of the disparity described here.

Keywords: treatment-as-usual, treatment targets, therapist behavior, comorbidity, archival data

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Chapter 1. INTRODUCTION

The majority of children's mental health challenges can be considered as either internalizing or externalizing problems, sometimes also referred to as emotion vs. behavior, or troubled vs. troublesome (e.g., Achenbach, 1966; Achenbach & Edelbrock, 1978; Hoghughi, 1978). In a highly-influential factor analysis, Thomas Achenbach originally queried 600 Minnesota parents about their children's range of emotional/behavioral concerns and found that a principal, bi-polar, single factor of "externalizing problems" versus "internalizing problems" captured a significant amount of variance for both males and females (Achenbach, 1966). Congruence coefficients (statistical measures of two different factor matrices meant to determine factor robustness) of this internalizing/externalizing factor, taken from the analysis of the entire sample and the first principal factors from each of four subgroups of the sample, ranged from .96 to .99 with a mean of .97 for males, and from .85 to .97 with a mean of .92 for females (Achenbach, 1966). Achenbach aptly described the distinction between the two sides of this factor in his original article:

> The label is not intended to carry dynamic implications. It means only that the symptoms at the Externalizing end describe conflict with the environment, while those at the other end describe problems within the self. (1966, p. 10)

Symptoms loading highly on the internalizing problems factorial pole included items like "phobias," "fearful," "worrying," and "nausea," while externalizing symptoms included "disobedient," "lying," "cruelty," and "vandalism." Over time, the internalizing/externalizing distinction in children's mental health has been confirmed through numerous analyses, and more recent meta-analysis of this work indicates that

these “liabilities” may best be conceptualized not as a single bi-polar factor, but as two superordinate, correlated factors in a hierarchical model of mental health problems (e.g., Krueger & Markon, 2006). Since 1966, Achenbach and others have broadened their sample to better represent the United States population, as well as several cross-cultural populations, and the widely-used and well-studied psychopathology measure, the Child Behavior Checklist (CBCL), continues to report children’s problems on internalizing and externalizing scales (Achenbach & Rescorla, 2001). While other authors have altered the nomenclature, referring to these two dimensions of impairment with such terms as “overcontrolled” versus “undercontrolled” problems (e.g. Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, M., 1996; Weisz, Weiss, Han, Granger, & Morton, 1995), the distinction between these concepts has been validated in confirmatory factor analyses, with anxious and depressed symptoms falling within the broadband internalizing category, and delinquent and aggressive symptoms falling within the externalizing category (Greenbaum & Dedrick, 1998, Krueger, 1999).

Some practical implications of the internalizing/externalizing (I/E) contrast in children’s mental health emerge upon examination of how treatment and treatment response can differ across these disorder categories. One of the first meta-analyses to investigate the differential response to treatment indicated that treatment outcome effect sizes were similar for children with internalizing and externalizing problems (Weisz et al., 1995). However, after controlling for gender, marginally-significant ($p < .10$) results indicated that youth with externalizing problems had slightly better outcomes (effect size = .58) than youth with internalizing problems (effect size = .44). Perhaps most relevant to the current study, Weisz and colleagues examined different outcome measures that

represented improvement in either externalizing or internalizing realms of functioning, and reported that therapy with a specific internalizing or externalizing focus had more than twice the effect size on the problems on which it focused (Cohen's *d*=0.52) than it did on problems on the other dimension (Cohen's *d*=0.22) (Weisz et al., 1995). Unfortunately, the study did not break this finding down further to determine more nuanced differentials (e.g., whether externalizing-focused treatments had greater effect on internalizing symptoms, compared to the effect of internalizing treatments on externalizing symptoms), but provided early evidence to suggest that a therapist's focus on internalizing or externalizing problems can affect children's treatment outcomes.

The continuing development of evidence-based treatment research has pointed to manualized therapies that work better for some specific disorders than others, as well as practice elements or "modules" within those therapies that tend to be more frequently utilized in successful treatment of specific problems (e.g., Burns, Hoagwood, & Mrazek, 1999, Chorpita, Daleiden, & Weisz, 2005, Silverman & Hinshaw, 2008, Substance Abuse and Mental Health Services Administration, 2014). These interventions often fall discretely within either the internalizing or externalizing classification. Examples of therapeutic elements with empirical evidence exclusively associated with externalizing disorders such as Conduct Disorder and Oppositional Defiant Disorder include parent management training and time-out (Chorpita & Daleiden, 2009, Chorpita & Daleiden, 2009). Conversely, exposure and activity scheduling are current evidence-based interventions suggested for internalizing disorders spanning anxiety and depression (Chorpita & Daleiden, 2009, Chorpita & Daleiden, 2009). While it is noteworthy that many of these therapeutic interventions and specific modules fall under the general

umbrella of "cognitive behavior therapy" (CBT), upon further examination, the principles, goals, and mechanisms of change in CBT differ across the internalizing/externalizing dimension (Substance Abuse and Mental Health Services Administration, 2014). These disparate treatment approaches suggest that therapists' intervention plans, when properly informed by the growing empirical evidence base, would look different for internalizing disorders and externalizing disorders.

Comorbidity

The notion that certain treatments appear best suited for externalizing diagnoses and other distinctly different treatments work best for internalizing disorders becomes problematic given the high rates of youth, and particularly youth in treatment, with problems in both areas. An examination of both community and clinic samples indicates that children's mental health problems are not cleanly divided between these two categories; to the contrary, there is often a strong covariance between internalizing and externalizing symptoms, commonly referred to as co-occurrence or comorbidity (when diagnoses are applied) (Feinstein, 1970; Lilienfeld, 2003; Mueller, Stalk, & Orimoto, 2012). Wolff and Ollendick (2012) provide a review of the comorbidity literature specifically regarding the comorbidity of conduct disorder and depression. Citing a variety of community and clinic studies, they note that 45.8% of those with a lifetime oppositional defiant disorder also meet criteria for a mood disorder; over 30% of clinically referred children diagnosed with depression also meet criteria for conduct disorder; and of those with conduct disorder, 50% also meet for a depressive disorder. Similarly, Cunningham and Ollendick (2010) have noted that anxiety and conduct-related problems also occur together across several samples, reporting that 20% of children

attending specialty anxiety disorder clinics meet criteria for a disruptive behavioral disorder, whereas approximately 40% of youth with conduct problems meet criteria for an anxiety disorder in clinics specializing in conduct problems. This relatively high frequency of youth whose problems do not discretely fall into internalizing or externalizing categories leads to two relevant discussions. The first, for which there is significant extant research and which will be addressed directly, is how the combination of these problems affects impairment and treatment outcomes in children. The second, for which fewer data exist and upon which the current study focused, is how therapists prioritize their treatment decisions when faced with children exhibiting both internalizing and externalizing problems.

Impairment/Response to Intervention among Comorbid Children

Within the last two decades, studies have emerged suggesting that comorbidity, especially when diagnoses fall within both internalizing and externalizing categories, can lead to both greater impairment and poorer treatment response, although results have been mixed. While several studies examining co-occurring anxiety and conduct disorders suggest that anxiety symptoms may attenuate conduct problems (e.g., Mason, Kosterman, Hawkins, Herrenkohl, Lengua, & Mccauley, 2004; Pine, Cohen, Cohen, & Brooke, 2000), other research suggests that this comorbidity increases the risk of more severe psychopathology (Kendall, Brady, & Verduin, 2001; Ollendick and King, 1994), worsens outcomes (Walker et al., 1991, Zocollilo, 1992) and decreases response to medication (Ginsburg, Kingery, Drake,& Grados, 2008). With regard to comorbid depression and conduct disorder, extant data suggest that these two problems lead to worse impairment than either of them in isolation. In Ezpeleta, Dome`nech, and Angold's (2006)

comparative study of comorbid and "pure" diagnosis cases, comorbid children were angrier, were more likely to set fires, exhibited more somatic complaints, and were more anxious than the pure conduct group. Moreover, in comparison with purely depressed children, the comorbid group had more somatic complaints, more severe anxiety, and greater functional impairment across home, school, and social spheres. Additional studies have indicated that comorbid children are more likely to affiliate with other antisocial youth (Ingoldsby, Kohl, McMahon, & Lengua, 2006), abuse substances (Fleming, Boyle, & Offord, 1993; Ingoldsby et al., 2006) and have more academic problems (Ingoldsby et al., 2006; Lewinsohn, Rohde, & Seeley, 1995) than purely depressed children. While a number of studies have indicated that comorbidity does not significantly affect treatment outcomes for children (Doss & Weisz, 2006; Kazdin & Whitley, 2006; Mueller, Tolman, Higa-McMillan, & Daleiden, 2010), others note an increase in post-treatment recurrence of symptoms (Crawley, Beidas, Benjamin, Martin, & Kendall, 2008; Rohde, Clarke, Lewinsohn, Seeley, & Kaufman, 2001).

Referral Bias in Systems of Care

Due to the evidence that externalizing and internalizing problems are conceptualized differently, respond to treatment differently, and can increase impairment when occurring together, the question of how these problems are actually treated in the community becomes important. System of care research provides a unique opportunity to answer this question. The system of care model, originally proposed by Stroul and Friedman (1986), has been utilized to provide integrated mental health services in communities across the country, servicing thousands of children every year through a variety of public health organizations (Sebelius, Hyde, Power, Randolph, & Blau, 2010).

To summarize the typical process underlying this model, children are referred for services by a concerned adult (e.g., a teacher, a school-based behavioral health specialist, a social worker, a probation officer, a principal, or a parent/caregiver) when they exhibit significant emotional or behavioral concerns. They then receive mental health assessments (if they have not been sufficiently assessed previously), which typically involve the assignment of one or more diagnoses from the Diagnostic and Statistical Manual of Mental Disorders (DSM). Next, they are assigned to a particular level of care ranging from counseling services to hospitalization, and a program of treatment is planned and implemented. The progress of this treatment is monitored, and modifications to treatment are made as needed until services are no longer needed or are otherwise terminated (State of Hawaii, 2012).

A noteworthy context within which to view the differential approach to internalizing and externalizing problems is the referral process in the system of care model. In the somewhat limited research that compares clinic to community samples, researchers have repeatedly found evidence suggesting that samples of youth with mental disorders drawn from clinical settings are non-representative of youth in the general population suffering from these same problems (Angold, Costello, & Erkanli, 1999; Costello & Janizewski, 1990; Goodman, Lahey, Fielding, Dulcan, & Regier, 1997). While these studies have not yet identified the exact causes of potential referral biases, one common conclusion is that clinic-referred children seem more representative of youth with more (or more severe) externalizing problems (e.g., suspensions/expulsions, police involvement) than children not receiving services in the community. Given the notion that externalizing struggles are "with the environment" and internalizing problems

are “within the self” (Achenbach, 1966), it is logical to assume that referral sources may be faster to recognize externalizing problems due to their increased environmental salience. The potential accuracy of this assumption can be assessed by examining community base rates of psychopathology and comparing them to referral rates in systems of care. If, for example, 10 of every 100 children in the community are depressed, and 10 of every 100 children in the community are oppositional/defiant, this would suggest that there are approximately equivalent numbers of depressed children and oppositional/defiant children in our systems of care if they are being referred without bias. If there is a disproportionately high number of children with oppositional/defiant problems who have been referred for services, however, this would suggest that our assumption is true, and that there may be a bias toward referring children for services who have more salient, easily-observable externalizing problems.

In Hawai‘i’s system of care, there is evidence to suggest such an overrepresentation of children with externalizing problems. When comparing data from national prevalence studies by Merikangas, He, and Burstein (2010) to the sample of adolescents receiving services through Hawai‘i’s Children and Adolescent Mental Health Division (Chorpita & Daleiden, 2009), clear differences emerge between these two samples in their respective ratios of disruptive behavior disorders (DBDs) to mood and anxiety disorders. National prevalence figures suggest that 8.7% (±0.8%) of children living in Hawai‘i carry a disruptive behavior disorder diagnosis, that 11.2% (±1.0%) of children carry a mood disorder diagnosis, and 8.3% (±.4%) of children carry an anxiety disorder diagnosis (Merikangas et. al, 2010; Merikangas, He, Brody, Fisher, Bourdon, & Koretz, 2010). As such, an unbiased referral system would point to the same relative

rates in treatment. However, the actual rates in treatment for disruptive behavior disorders (DBDs), mood disorders, and anxiety disorders in Hawai‘i’s Children and Adolescent Mental Health Division are 69%, 43%, and 28%, respectively (Chorpita & Daleiden, 2009). Comparing the treatment rates to the assumed community rates indicates a 2.1-fold increase in the likelihood of children with DBDs receiving treatment compared to children with mood disorders, and a 2.4-fold increase in the likelihood of children with DBDs receiving treatment compared to children with anxiety disorders.

Therapists’ Treatment Targets

The co-occurrence of externalizing and internalizing problems in children receiving mental health services requires treatment providers to make decisions regarding which of these problems is addressed during intervention. This notion of the problems targeted during treatment, henceforth referred to as “treatment targets,” has received a varying amount of attention in mental health literature over the decades. From the late 1970s through most of the 1980s, treatment target identification became a substantial focus of the assessment and treatment process as behavior therapy rose to prominence as a mental health intervention (Kanfer, 1985; Kanfer & Grimm, 1977; Kazdin, 1985; Weist, Ollendick, & Finney, 1991), instigating a shift of target focus from the identification of antecedents common in traditional psychoanalysis to the evaluation of required changes necessary for effective functioning (Kanfer, 1985; Kazdin, 1985). This coincided with the emergence of the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III) as the preferred tool by which to target behaviors for treatment due to its novel, multi-axial method of identifying problems, incorporating some of the efficiency of a purely diagnostic model, while retaining some of the

ideographic qualities of a behavior-analytic model (Kanfer, 1985). However, long before the days when comorbidity was formally identified as a potential confound to the treatment planning process, the decision of which problems to treat was still considered challenging due in part to incomplete understanding of the driving forces behind many emotional problems, and therefore which targets would lead to the most efficacious mitigation of those problems (Kazdin, 1985; Weist et al., 1991).

As the DSM's compartmentalization of mental health problems has provided practitioners with a sourcebook delineating which problem behaviors to target based on which diagnoses patients receive, the field seems to have moved away from treatment targets as an area in need of further exploration. The first pages of the DSM-IV-TR delineate the method for targeting problems in treatment, advising the assessor/therapist to identify a "principal diagnosis" (p.3), and use this as the primary focal point of treatment planning (American Psychiatric Association, 2000). However, within the last decade, in-depth treatment-as-usual and system-of-care research has begun to emerge, which moves beyond the theoretical discussion of the 1980s and examines how therapy actually works, in session, in communities, in the real world (e.g., Garland, Brookman-Frazee, Hurlburt, Accurso, Zoffnes, & Haine-Schlagel, 2010; Garland, Haine, & Boxmeyer, 2007; Orimoto, Mueller, Hayashi, & Nakamura, 2014; Weisz, Chorpita, Frye, Ng, Lau,Bearman,& Langer, 2011). With this change of focus, treatment targets have again crept into the research picture, as Weisz et al.(2011), for example, have indicated that the targeting of problem behaviors is not as simple as a DSM diagnosis, and that there is much disagreement between the therapist, the child, and the child's family as to what problems require prioritization in treatment. Given the many factors involved in

treatment beyond diagnosis (child and family desires, gender issues, type of care, etc.), a single DSM diagnosis does not provide the clinician with sufficient information for a treatment plan, and comorbid internalizing and externalizing DSM diagnoses further complicate clinical decision making. If there are different therapeutic practices indicated for externalizing and internalizing problems and if a significant proportion of youth present with more than one problem, then it is unclear both what the therapist should do and what the typical therapist is doing.

Treatment-as-Usual in the State of Hawai‘i

The limited knowledge of how treatment-as-usual services work is particularly distressing due to (a) the many children with mental health issues in the United States who receive these services (Weisz, 2004; Burns et al., 1999) and (b) the studies that have analyzed effect sizes of TAU interventions that suggest discouraging results, often reporting near-zero treatment effects (e.g., Bickman, 1996; Garland et al., 2007; Garland et al., 2010). The lack of knowledge about what precisely is happening in TAU settings has been realized within the past decade, and treatment-as-usual has been at the center of a burgeoning field of research. In Hawaii, a class-action lawsuit against the state resulted in the development of a comprehensive system of care for Hawai‘i’s youth with mental health difficulties that included significant quality assurance, recording, and accountability components (Daleiden, Lee, & Tolman, 2004). The data collected as a result of these components have provided unique opportunities to study the functioning of TAU in a state-funded system of care. The therapist-completed Monthly Treatment and Progress Summary (MTPS) requires therapists to record a variety of information about their treatment of individual clients each month, including treatment targets, practice

elements used to address the identified treatment targets, and the rate of improvement on each of these targets (Chorpita & Daleiden, 2009). While much work remains to fully understand the strengths and limitations of this instrument, data from the MTPS have been used in a range of studies over the last decade (e.g., Chorpita & Daleiden, 2009; Daleiden et. al, 2004; Love, Orimoto, Okado, and Mueller, 2012; Orimoto et. al, 2014; Nakamura, Daleiden, & Mueller, 2007), several of which will be discussed in further detail below.

Findings from two studies utilizing the MTPS may be particularly important in better elucidating the choices therapists make when faced with comorbid internalizing and externalizing problems. Via MANOVA analysis, Daleiden, et al.(2004) revealed that target selection via the MTPS was significantly related to a youth's primary diagnosis at intake ($p < .01$), and targets that were theoretically unrelated to the youth's primary diagnosis were endorsed at significantly lower rates than would be expected if target selection was independent of primary diagnosis. For example, targets of "Anxiety" and "Traumatic Stress" were positively associated with "Anxious/Avoidant" diagnoses, and targets of "Hyperactivity" and "Self-Management/Self-Control" were negatively associated with "Depressed and Withdrawn" diagnoses. While this study provided preliminary support for the correlation between treatment targets and specific diagnostic groups, it suffered from several shortcomings, including the fact that it only looked at "primary" diagnosis and did not consider comorbidity, and the fact that MTPS reporting did not become mandatory until two years after the study was published, potentially limiting the number and variance of MTPS responses received (Daleiden & Chorpita, 2009).

In a more recent study by Love, Orimoto, Okado, and Mueller (2012), the researchers performed exploratory and confirmatory factor analyses on all treatment targets endorsed by treatment-as-usual therapists working with over 800 children within the "intensive in-home" level of care from 2006-2008. This particular level of care, which consists of a variety of services delivered at home, school, or other community settings for a variety of mental health concerns, was chosen to capture maximum variance in child and adolescent treatment and to most closely reflect the treatment research literature, which is predominantly focused on outpatient services. The Love et al. study was also limited to the first 6 months of treatment to control for expected variance in treatment target selection due to longer treatment episodes, which might lead to the addressing of treatment targets beyond the scope of initially-identified problem areas, and to compensate for the fact that treatment targets were addressed as "present" or "absent," in an entire treatment episode, with no adjustment for the number of times a particular target was endorsed during that treatment episode.

Love et al. (2012) analyses resulted in a five-factor model, in which treatment targets were grouped in areas that the researchers coined "Disinhibition," "Avoidance" "Negative Affect," "Problems with Delinquency," and "Neurobiological." One of these factors (Negative Affect) appears to fall within the realm of internalizing problems, while the Disinhibition factor seems to fit within the externalizing range of disorders. The "Problems with Delinquency" factor does not unambiguously reflect externalizing problems as it includes "substance abuse", "runaway," and "school refusal/truancy," each of which can be manifestations of internalizing problems, at least in some cases. The targets in each of these factors were moderately to highly interrelated, with factor

loadings ranging from .43 to .82 (Love et al. 2012). While these factors were derived from an extremely diverse sample of children, more than 70% of which carried more than one DSM diagnosis (Daleiden & Chorpita, 2009), they still seem to delineate a substantial group of treatment target choices that fall categorically into the internalizing/externalizing classifications of problems.

While substantial work has been done to understand some of the patterns in the target selection process, it is not known what therapists target for youth with purely internalizing or externalizing disorders, much less for youth with mixed internalizing/externalizing problems. As previously discussed, it is suspected that treatment providers might focus on externalizing problems, given that they might be operating under the same pressures, biases, and/or assumptions as referral sources; indeed, therapists might be under pressure from referral sources themselves to address the problems that induced the child's referral in the first place. While this does not necessarily present a problem for children with a single externalizing diagnosis, this decision-making process is put into question if a child receiving treatment has also received an internalizing diagnosis from a trained mental health assessor. Given that internalizing and externalizing disorders are treated differently, respond to treatment differently, and can cause increased impairment when occurring together, a therapist who fails to address both concerns might be providing substandard services.

Study Aims

The current study used an empirical measure of internalizing (defined as anxiety and depressed mood) and externalizing (defined as disruptive behavior and attention deficit/hyperactivity-hyperactive/combined types only) treatment target endorsement to

assess to what extent therapists who treat children with comorbid internalizing and externalizing diagnoses disproportionately select targets that are more like those selected for youth with externalizing-only diagnoses than like those selected for internalizing-only diagnoses. Additionally, this study evaluated whether the factors of youth's age, youth's gender, treatment episode length, and/or youth's functional impairment at onset of treatment affected the proportion of externalizing treatment targets selected, and if so, whether any findings regarding target selection and diagnostic categories remained after controlling for such effects. It was hypothesized that children with purely internalizing and purely externalizing problems would be treated in significantly different ways, but that treatment for children with both types of problems would more closely resemble that for children with externalizing-only concerns.

Chapter 2. METHOD

Sample Characteristics

System of Care. Archival data based on all youth between the ages of 3 and 19 who received services in the Hawai'i Child and Adolescent Mental Health Division (CAMHD), a comprehensive state-funded mental health system, from July 1, 2006 to December 30, 2012, were retrieved from the CAMHD Management Information System (CAMHMIS) database. The CAMHD mental health intervention system is comprised of a wide range of intervention services subsumed under "levels of care," which range from Hospital-Based Residential services to Therapeutic Foster Care to Intensive-in-Home services (IIH). The sample of youth for this study was limited to those receiving IIH services for a minimum of 90 days and a maximum of 1611 days (the maximum treatment episode length across qualifying clients). The 90-day minimum episode length was selected to insure at least three data points across all cases.

Participants. All client data were compiled and the sample was limited to include youth who carried a specific list of "internalizing" and "externalizing" diagnoses noted below (N=679). This sample was then separated into the following four diagnostic groups:

1) "Group I_o" (n =195): Children with only "internalizing" diagnoses (i.e., any anxiety disorder and/or depressed mood disorder, but excluding: Mood Disorder - Not Otherwise Specified (NOS)[1]; any Bipolar Disorder; Cyclothymic Disorder; or Adjustment Disorders with Depressed Mood) and no diagnosis in the "externalizing" group described next;
2) "Group E_o" (n=314): Children with only "externalizing" diagnoses (i.e., Conduct Disorder and/or Oppositional Defiant Disorder and/or Disruptive

Behavior Disorder-NOS and/or ADHD, Primarily Hyperactive or Combined Types) and no diagnoses in above Group I_o;

3) "Group I_P" (*n*=75): Children with at least one internalizing diagnosis (one of which is defined as the "primary" diagnosis) and at least one additional externalizing diagnosis; and
4) "Group E_P" (*n*=95): Children with at least one externalizing diagnosis (one of which is defined as the "primary" diagnosis) and at least one additional internalizing diagnosis.

Due to the fact that the CAMHD dataset includes up to three Axis 1 diagnoses per client, additional analyses were performed to determine whether any combination of three internalizing/externalizing diagnoses resulted in a significant change in treatment target selection for youth with both internalizing and externalizing diagnoses. There were no significant between-group differences due to such multimorbidity, and therefore the four diagnostic group model noted above was used in the remainder of the analyses.

The sample was ethnically diverse (with 61% of clients described as "Multi-ethnic"), approximately 64% male, had an average age of approximately thirteen years, and had an average of nine and median of seven MTPSs per completed treatment episode (See Table 1 for more information). A series of ANOVAs indicated that two demographic variables differed significantly across diagnostic groups: client age, $F(3,675)=13.1$, $p<.001$, and client gender, $F(3,675)=18.4$, $p<.001$. These two variables were entered into the subsequent ANCOVA. While CAFAS scores and length of time in treatment did not differ significantly between groups, these variables were also included in the ANCOVA given the possibility that they could account for a significant amount of

variance in I/E score without differing significantly between diagnostic groups. Finally, the high percentage of clients identified as multi-ethnic across the diagnostic groups suggested that entering ethnicity into the analysis would result in uninterpretable findings, and this variable was therefore excluded from the ANCOVA.

The MTPS data reflected the work of 235 different clinicians in the CAMHD system. Although provider demographic information is limited, therapist characteristics were consistent with those seen in previous studies of the CAMHD intensive in-home level of care, indicating that a majority of clinicians had obtained masters' degrees (approximately 90%) from pre-service training programs including social work, counseling, psychology, marriage and family therapy, medicine, and nursing (Orimoto, Higa-McMillan, Mueller, & Daleiden, 2012).

Human Subjects Considerations

This study was submitted to and approved as exempt by the University of Hawai'i at Mānoa's Committee on Human Studies Institutional Review Board. Upon entry into the local system of care, youth clients and their legal guardian(s) receive a complete description of CAMHD's Notice of Privacy and Disclosure Procedures. They then provide written informed consent for the use of data for research purposes (Appendix A). This study meets the standards of the Health Insurance Portability and Accountability Act (HIPAA) and Family Educational Rights and Privacy Act (FERPA; CAMHD, 2006).

Measures

Monthly Treatment Progress Summary (MTPS). The treatment targets selected for these youth were obtained from the Monthly Treatment Progress Summary

(Daleiden et. al, 2004), an empirically-derived "checklist" of intervention targets and practices that serves as a mandatory common metric through which community therapists report treatment practices, treatment targets, and progress towards treatment goals, among other things (Appendix B). To date, MTPS studies have found preliminary support for treatment target convergent and discriminant validity when compared to DSM diagnostic categories (Daleiden et al., 2004), criterion and discriminant validity regarding rates of target-related improvement compared to other measures of functioning (Nakamura et. al, 2007), and exploratory and confirmatory factor analyses indicating reasonable factor validity of treatment targets (Love et. al, 2012).

On the MTPS, therapists may indicate up to 10 targets (from a list of 53 predefined targets and two write-in options labeled "Other") that were the focus of treatment during the reported month. These targets have been edited over time across updated versions of the MTPS, and a total of 66 targets are represented in the archival data set for this study (including seven deleted targets, one target labeled as "Other", and one target labeled as "Unknown," endorsed when a clear target choice could not be determined by data-entry staff). Since July 1, 2006, all service providers in the CAMHD system have been required to complete an MTPS every month for each treatment client in order to receive reimbursement for services (Chorpita & Daleiden, 2009). Data are collected statewide and entered into the Child and Adolescent Mental Health Management Information System (CAMHMIS) through the established operating procedures of Hawai'i's seven regional Family Guidance Centers (FGCs).

Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1994). The CAFAS is a 200-item clinician measure that assesses youths' level of functional

impairment. Client CAFAS score at or near treatment entry served as a covariate in the ANCOVA described below. Based on clinical interviews, case managers in CAMHD assign behavioral descriptions ordered by level of impairment within eight domains of functioning: School Role Performance, Home Role Performance, Community Role Performance, Behavior Toward Others, Mood/Emotions, Mood/Self-Harmful Behavior, Substance Use, and Thinking. Scores for each subscale are calculated by scoring the highest level of impairment (i.e., severe = 30, moderate = 20, mild = 10, no/minimal = 0) endorsed within the respective domain. Total scores are obtained by summing across the eight subscales. Interpretation guidelines for the total score suggest: 0-10 = "None to minimal impairment", 20-40 = "Likely can be treated on an outpatient basis", 50-90 = "May need additional services beyond outpatient care", 100-130 = "Likely needs care which is more intensive than outpatient and/or which includes multiple sources of supportive care", and 140+ = "Likely needs intensive treatment, the form of which would be shaped by the presence of risk factors and the resources available within the family and the community." Internal consistency of the CAFAS has been determined as adequate ($\alpha = 0.73$ to 0.78), with high inter-rater reliability across sites (0.92) (Hodges, 1995; Hodges & Wong, 1996). Concurrent validity studies have found that CAFAS scores are valid proxies to estimate treatment change, and are related to severity of psychiatric diagnosis, intensity of care provided, restrictiveness of living settings, juvenile justice involvement, social relationship difficulties, school-related problems, and risk factors (Hodges & Gust, 1995; Mueller et al., 2010; Nakamura et al., 2007).

Statistical Analyses

Previously discussed limitations indicated that an empirical measure of internalizing and externalizing target endorsement was necessary to fulfill the study aims. The current study addressed these limitations by analyzing the "externalizing only" (Group E_o) and "internalizing only" (Group I_o) groups of the sample to determine *de facto* targets most closely related to externalizing diagnoses and internalizing diagnoses. For each child in these groups, all treatment targets that were endorsed at least once across the sample (n = 58) were examined and assigned a proportion score indicating how often each given target was selected compared to the total number of times it could be selected as reflected in the following formula:

$$\frac{\sum \text{MTPSs in which target was endorsed}}{\text{Total Number of MTPSs}}$$

Given considerable positive skew in proportion scores, Mann-Whitney *U* tests were then conducted on all 58 targets across both groups (Mann & Whitney, 1947). Table 2 displays the mean and median endorsement ratios per treatment episode of each target broken into three groups: the entire sample of clients who met inclusion criteria for the study (N=679), clients with internalizing-only diagnoses (n=195), and clients with externalizing-only diagnoses (n=314). The targets are listed in order of mean proportion of endorsement across the entire sample, and the 22 targets with significant between-group differences are highlighted in bold font. As indicated in the table, Mann-Whitney *U* tests showed that thirteen targets were significantly related to internalizing-only diagnoses and nine targets were significantly related to externalizing-only diagnoses

(range of Mann-Whitney U =15570-29925; n_1=195, n_2=314; p <.05). These targets appeared face-valid with the exception of the externalizing target of "Self-Injurious Behavior" and the internalizing targets of "School Refusal or Truancy" and "Psychosis" (see Discussion for more details).

Study Aim (1): Assessing disproportionate selection of externalizing targets. In order to assess the degree to which therapists chose externalizing targets over internalizing targets for youth with both types of disorders, a dependent variable that reflected the proportion of externalizing and internalizing targets addressed in a given treatment episode was created. This dependent variable was determined using the 22 targets found to differ in endorsement ratios when purely internalizing and externalizing cases were examined. For each client, a single internalizing/externalizing score ("I/E score") ranging from -1 to 1 was determined over an entire treatment episode via the following formula:

$$\frac{\sum \text{MTPSs in which one or more 'E' targets are endorsed} - \sum \text{MTPSs in which one or more 'I' targets are endorsed}}{\text{Total Number of MTPSs}}$$

Note that via this formula, a minimum score of -1 represents endorsement of at least one internalizing (I) target every month and no externalizing (E) targets over the treatment episode, and a maximum score of 1 reflects endorsement of at least one 'E' target every month and no 'I' targets over the treatment episode.

This study required a statistical procedure that would allow for the examination of specific group differences between the I/E scores of Group I_o, Group E_o, Group I_p, and Group E_p given other covariates. Given the method through which the I/E score was derived, it was nearly certain that Group I_o would have a relatively low mean I/E score and Group E_o would have a relatively high mean I/E score. It was expected that the two comorbid groups (I_p and E_p) would have mean I/E scores that fell between the mean scores of Group I_o and Group E_o, indicating that a more mixed group of internalizing and externalizing targets were selected for these cases. The scores were hypothesized to distribute as follows:

$$I_o < I_p < E_p < E_o$$

Further, if no bias existed toward the selection of externalizing targets in treatment, the following equations would provide a simplification of the null hypothesis of the current study:

$$E_o - E_p = I_p - I_o, \text{ or, equivalently: } 0 = -I_o - E_o + I_p + E_p$$

Practically speaking, this equation would indicate that there is no difference between the absolute change in I/E score when a comorbid internalizing diagnosis is added to a primary externalizing diagnosis and the absolute change in I/E score when a comorbid externalizing diagnosis is added to a primary internalizing diagnosis. The alternative hypothesis, indicating a tendency toward selecting externalizing targets, would therefore be expressed as:

$$E_o - E_p < I_p - I_o, \text{ or, equivalently: } 0 < -I_o - E_o + I_p + E_p$$

Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA) statistical tests were chosen due to the increased interpretability of the differences between contrast-coded variables that these analyses offer (Aron, Aron, & Coups, 2009; Green & Salkind, 2005). Given that the null hypothesis can be represented mathematically as $0 = -I_o - E_o + I_p + E_p$, the diagnostic groups were simply coded orthogonally to correspond with this equation, as follows:

Group I_o	Group E_o	Group I_p	Group E_p
-1	-1	1	1

This contrast was then analyzed via univariate ANOVA to determine whether the actual difference measured was significantly greater than zero.

Study Aim (2): Determining and controlling for additional significant predictors of target selection disparity. In addition to the aforementioned ANOVA of the contrast-coded independent variables, an ANCOVA that included several covariates was also performed to highlight whether any between-group differences remained significant after other client variables were included in the model. Client gender was included as a categorical predictor variable, and length of treatment episode (ranging from 90-1611 days), functional impairment at onset of services (ranging from 10 to 200 as indicated by CAFAS scores), and age (ranging from 3 to 19 years old) were included as continuous predictor variables.

To address the possibility that youth I/E scores may vary significantly due to the therapists or organizations that provide their treatment services, an intraclass correlation coefficient (ICC) was calculated by estimating the amount of variance in the I/E score

explained by therapist/organization (Heck, Thomas, & Tabata, 2010). The ICC between client and organization was 0.03, indicating that clients are not significantly nested within provider organization to warrant multi-level analysis. While the ICC between client and individual therapist was measured at .40, this number should be interpreted with caution, given that (a) 235 different clinicians provided services for the 679 youth of this sample, and (b) that the most common ratio of client to clinician was 1/1 (n=84). When the ICC was adjusted to account for the number of different clinicians in the sample, it dropped to .085. While multi-level modeling may be a worthwhile analytic procedure to address the research question, this moderately low ICC combined with the high clinician-to-client ratio prompted the use of a non-hierarchical approach to data analyisis for the current study.

Data Preparation

Missing Data: The mandatory nature of MTPS submissions minimizes many of the potential challenges that can occur due to missing data. However, it is noted that CAFAS scores were absent for 20 children in the sample (14 in the E_o diagnostic group and two in each of the other three groups). As such, all analyses were run with and without those 20 cases. A second concern regards changes that have been made to the MTPS over the decade since its inception. While there are 53 treatment targets from which to choose on the most recent version of the MTPS (published in 2008), another seven targets had been included on a previous version of the MTPS but eventually removed due to low endorsement rates (Chorpita & Daleiden, 2009). The current study addressed this concern by including all endorsed targets in the current data analysis while noting those targets that had been removed from the most recent version of the MTPS.

Chapter 3. RESULTS

An ANOVA comparing the mean I/E score across the four diagnostic groups indicated a main effect for group differences, $F(3,675)=76.50$, $p<.001$, and Tukey post-hoc tests indicated that there were significant differences between all groups apart from the E_o and E_p groups (See Figure 1 for a representation of results). The amount of variance in I/E score accounted for by diagnostic group was 25% (adjusted $R^2=0.25$).

An ANOVA incorporating the hypothesis-testing planned contrast indicated that the difference between the I_p and I_o groups was significantly larger than the difference between the E_o and E_p groups (Value of Contrast=.205, t=2.37, $p<.05$). The effect size of the I_p and I_o group difference (Cohen's *d*=.64) was 2.67 times larger than the comparable E_o and E_p group difference effect size (Cohen's *d*=.24). This significant contrast effect remained even when the twenty cases missing CAFAS scores were eliminated from the sample (Value of Contrast=.200, t=2.27, $p<.05$).

Finally, the ANCOVA indicated that diagnostic group remained a robust predictor, $F(3,651)=48.07$, $p<.001$, even after including age, gender, CAFAS score, and length of treatment episode as covariates. Younger age at start of treatment, $F(1,651)=32.64$, $p<.001$, male gender, $F(1,651)=18.13$, $p<.001$, and higher CAFAS score, $F(1,651)=6.12$, $p<.05$,were all significantly associated with a higher I/E score in the full model, explaining an additional 5.5% of the variance in I/E score above and beyond diagnostic group membership (adjusted R^2 of the full model = .305). Length of treatment episode was the only non-significant factor in the model, $F(1,651)=.78$, $p=.38$. Despite this addition of several significant covariates, the planned contrast indicated that the magnitude of difference between the I_p and I_o groups remained significantly larger

than the difference between the E_o and E_p groups in the full model (Contrast Estimate=.183, $F(1,651)=4.65$, $p<.05$).

Chapter 4. DISCUSSION

Intensive-in-home therapists working in Hawaii's child and adolescent mental health system of care selected significantly different treatment targets for youth carrying internalizing-only versus externalizing-only diagnoses. Using a metric based upon these differences, comparisons that included youth with comorbid internalizing and externalizing disorders indicated that the addition of an externalizing disorder to a primary internalizing disorder predicted greater change in therapist target selection than the addition of an internalizing disorder to a primary externalizing disorder. Findings held after consideration of missing values and after controlling for potential confounds (youth age, gender, and level of impairment at or near treatment entry).

Love, et al.'s (2012) factor analysis provides some support for the convergent validity of the 23 targets used to develop the "I/E score" metric. All six of Love et al.'s targets within the "Disinhibition" factor (Hyperactivity, Attention Problems, Anger, Aggression, Empathy, and Oppositional/Non-Compliant Behavior) fell within the current study's externalizing target grouping, and all five targets within the "Negative Affect" factor (Self Esteem, Grief, Depressed Mood, Suicidality, and Traumatic Stress) fell within the internalizing target grouping. These targets were also generally face-valid, with the notable exceptions of "Self-Injurious Behavior," which was found to be related to externalizing-only diagnoses, and "School Refusal/Truancy" and "Psychosis," which were found to be related to internalizing-only diagnoses. While MTPS instructions explicitly indicate that "Self-Injurious Behavior" refers to "acts of harm, violence, or aggression directed at oneself" (Appendix B), it is possible that clinicians frequently interpret this target as referring to the risky, impulsive, and potentially dangerous

behaviors in which disruptive youth may engage, or perhaps as a more discrete proxy for substance use. The "School Refusal/Truancy" target appears to refer to two opposing motivations for non-attendance, as "School Refusal" often refers to negative affect-related processes inhibiting school attendance (e.g., social phobia or separation anxiety), and "Truancy" typically refers to a disruptive avoidance of school, often associated with other behaviors negatively impacting the community, as in Conduct Disorder (e.g., APA, 2000; Hodges, 1995; Kearney & Silverman, 1993). As noted in Table 1, the internalizing-only sample had a mean age approximately two years higher than the externalizing-only sample, and given that truancy has been indicated as the conduct disorder symptom with the oldest median age of onset (Lahey et al., 1999), the significant difference in this target's score may be in part related to the age distribution of the two diagnostic groups. Finally, no hypothesis was advanced with regard to the "Psychosis" treatment target, given that thought disorder and perceptual disturbance do not typically fall clearly within either internalizing or externalizing dimensions of psychopathology (e.g., Achenbach & Rescorla, 2001). While Mann-Whitney analysis indicated that the "Psychosis" target was almost exclusively associated with internalizing youth, only six individuals in the entire sample received "Psychosis" as a treatment target, and no member of either comorbid diagnostic group received the "Psychosis" target. To determine whether these three targets distorted the results, the I/E score was recalculated excluding them and the ANOVA and ANCOVA were rerun. While t and *F* values decreased slightly, contrasts remained significant for both analyses (Value of Contrast=.199, $t=2.25$, $p<.05$; Contrast Estimate=.177, $F(1,651)=4.06$, $p<.05$, respectively).

As predicted and found in the contrast coding comparison, there appears to be a therapist preference toward addressing externalizing targets more than internalizing targets with comorbid youth (Figure 1). These findings parallel evidence suggesting that children with externalizing problems are referred for mental health services at a disproportionately higher rate. There are a number of potential explanations for this effect. Therapists might simply be treating the most obvious problem, and many externalizing problems are more easily-observed than internalizing concerns (e.g. truancy or fighting compared to withdrawal or fearfulness). Another possible contributor is a potential relative difficulty inherent in treating internalizing problems. Research suggests that exposure therapy, for example, is underused among TAU providers despite its classification as an evidenced-based treatment with good empirical support for treating anxiety disorders (Chorpita & Daleiden, 2009). This underuse may be due to the difficult nature of the intervention (Becker, Zayfert, & Anderson, 2004). Convergent with these findings, Weisz, et al. (1995) found that higher therapist education level was associated with better outcomes for child internalizing problems, but not with better outcomes for child externalizing problems, suggesting that internalizing problems may be more difficult to treat. Another potential factor is the carry-over effect of the referral bias toward externalizing pathology described above. If youth with externalizing problems are referred at a disproportionate rate, referral sources may be overtly or implicitly cuing therapists to prioritize externalizing problems in treatment. Further, given that the majority of children who receive intensive-in-home services present with externalizing problems, therapists may fall prey to expectation biases, assuming that children under their care will be suffering from externalizing problems and therefore priming themselves

to notice and address these above any internalizing challenges. It is also worthwhile to consider the role of the aforementioned significant covariates determined in the ANCOVA (i.e., age, gender, and functional impairment) in predicting externalizing target selection, given that estimated regression coefficients indicated that males, younger youth, and youth with more severe functional impairment (as measured by CAFAS scores) were significantly more likely to receive higher I/E scores. Finally, it is possible that this therapist preference is actually a thoughtful and positive therapeutic decision (e.g., it remains an open question as to whether youth with comorbid disorders are better-treated with services emphasizing one or another problem area).

Limitations

There are several issues that might limit interpretation of these findings. Given that the dependent variable for the ANOVA and ANCOVA tests (the "I/E Score") was a derived measure meant to quantify the degree to which therapists chose externalizing versus internalizing targets, there is reason to question whether this score is a valid and accurate measure of target choice. Indeed, the standard deviations of mean I/E scores were relatively high across the four diagnostic groups of interest (ranging from .456 to .528), reflecting considerable variance within groups. However, this measure was conservatively-designed, so that a score of 1, for example, could only be achieved under circumstances in which at least one externalizing target was present and all internalizing targets were completely absent during each and every month. To check against false inferences related specifically to the way the I/E score was calculated, a reanalysis of the data using a score based on the overall number of internalizing or externalizing targets

selected per month was run. To accomplish this, the I/E score for each client over an *n*-month treatment episode was recalculated using the following formula:

$$\sum_{i=1}^{n}(\text{Total } 'E' \text{ targets endorsed in month } i - \text{Total 'I' targets endorded in month } i)$$

Total Number of MTPSs

ANOVA and ANCOVA were rerun on this I/E score, and contrasts remained significant for both analyses, with moderate increases in t and *F* values (Value of Contrast=.553, t=2.39, p<.05; Contrast Estimate=.542, $F(1,651)=5.95$, p<.05, respectively). These results provide support for the originally-calculated I/E score as a conservative and valid measure of therapist treatment target endorsement. Additionally, the error variance of I/E scores was distributed relatively normally across the sample, and the means of I/E scores across the four diagnostic groups were distributed as hypothesized ($I_o<I_p<E_p< E_o$). Such evidence suggests the I/E score was a reasonably valid way to measure therapists' treatment target preference.

Another potential concern regards the method by which treatment episode length was addressed in the ANCOVA. While treatment episode length did not account for significant variance in I/E score, it is conceivable that there might have been change in the I/E endorsement rates of individual treatment targets over time. To address this concern, a follow-up analysis was performed in which internalizing and externalizing treatment targets were broken down by monthly endorsement rates across diagnostic groups across the first six months of treatment. Endorsement rates of individual targets

remained largely stable over time, with only 13 of 88 possible target endorsement rates changing by more than 0.05 over six months. The greatest change in a single target endorsement rate occurred within the E_p group, in which the endorsement of "Oppositional or Non-Compliant Behavior" fell from .56 to .43 over six months of treatment. However, this relatively large decrease had a minimal effect on the overall mean externalizing target endorsement rates within the E_p group (with mean externalizing target endorsement rates falling slightly from .21 to .20 across the six treatment months). These data suggest that changes in the selection of individual targets from month to month had little effect on either the I/E score or the study findings.

A third concern relates to whether specific individual targets are driving I/E score group differences, which would suggest that the results are less due to a general internalizing/externalizing distinction, and instead due to therapists focusing on a few highly-endorsed targets at widely variable rates across diagnostic groups. An examination of Table 3 suggests this is not so. While highly-endorsed targets do exist (e.g., "Oppositional or Non-Complaint Behavior," "Aggression," and "Anger" for externalizing diagnoses, and "Depressed Mood" and "Anxiety" among internalizing diagnoses), these targets are rationally related to the problem dimension they represent, and their mean proportions of endorsement did not always follow the pattern of mean I/E scores across diagnostic groups (see "Anger" and "Anxiety" in Table 3). This suggests that other, less-frequently endorsed targets are also playing a significant role in the distribution of I/E scores.

Extrapolating therapist behavior from self-reported archival data is another limitation. Although the use of self-report is an efficient method of studying treatment

as usual, it may be less effective than observational coding at identifying subtleties in treatment delivery, and research has pointed to inconsistencies between direct observations of therapist behaviors and their self-reports (e.g., Borntrager, Chorpita, Orimoto, Love, & Mueller, 2013; Garland, et al., 2010; Hurlburt, Garland, Nguyen, & Brookman-Frazee, 2010). This is particularly relevant given that MTPS data are taken on a monthly basis, and this study therefore assumes that if a therapist selected target X in both month A and month B, the degree to which the therapist targeted X in month A is equivalent to the degree to which the therapist targeted X in month B. There are many situations in which this might not be the case, given that one MTPS may summarize a single treatment session in a given month, while another MTPS may summarize multiple treatment sessions. It is for this reason that the I/E score was designed to capture the absence of a given set of treatment targets, rather than the degree to which they were present, and weighted the presence of one internalizing target in a given month, for example, exactly the same as the presence of all thirteen internalizing targets in a given month.

Finally, the sample studied here was housed within a system of care that underwent significant changes over the course of the study's service date range, including implementation of other evidence-based practices, encouragement and some training on the use of practices consistent with the evidence-base, and strong emphases on Child and Adolescent Service System Program (CASSP) principles (Higa-McMillan, Powell, Daleiden, & Mueller, 2011). Whether such therapist preferences would be found in other TAU settings with different measures of therapy is unknown and worthy of further pursuit. That said, such a discrepancy in a system with a relatively strong background and

procedures supporting evidence-based practices might suggest even greater discrepancies in other TAU contexts.

Future Directions

Given predictors used in this study accounted for only 30% of variance in I/E scores, other factors are likely to contribute to therapists' tendency to select externalizing targets for youth with comorbid disorders. It might be beneficial for additional studies to focus on the precise reasons that therapists disproportionately focus on externalizing problems, potentially via the analysis of a series of questionnaires, interviews, or clinical vignettes. However, one question that has not yet been fully answered and might be amenable to examination via analysis of the CAMHD archival dataset is whether the outcomes for youth with comorbid diagnoses differ as a result of the therapist choices described here. It is possible, for example, that therapists in Hawai'i's system of care have a unique understanding of the children they serve, and that their general preference for focusing on externalizing problems may lead to a faster and more robust reduction of impairment in both internalizing and externalizing domains of functioning. It is also possible, however, that addressing internalizing problems with externalizing interventions results in decreased treatment effects (as in Weisz, et al., 1995), or, even worse, that a disproportionate focus on externalizing problems when internalizing problems are also present results in an intensification of both problems. Such evidence could point to approaches that yield the best result, and might offer a new specific area of focus for those seeking to better develop and test treatments for such comorbid youth and for those interested in dissemination and implementation of evidence-based practices.

Footnotes

[1]Mood Disorder-Not Otherwise Specified is not included in the Group I diagnostic sample because this diagnosis can include symptoms of mania, which could be addressed via externalizing targets, therefore confounding results.

TABLES

Table 1. *Sample demographic and clinical characteristics by diagnostic group and overall*

Demographic	**Diagnostic Group**				
	I-only (*n*=195)	I-primary (*n*=75)	E-primary (*n*=95)	E-only (*n*=314)	Total (*N*=679)
Percentage Male[1]	$47\%_{a}$	$53\%_{a}$	$66\%_{b}$	$77\%_{b}$	64%
Mean Age at Episode Start (SD)[1]	$13.9(3.1)_{a}$	$13.1(3.2)_{ac}$	$12.7(3.4)_{bc}$	$11.8(4.0)_{b}$	12.7(3.7)
Percentage Multiethnic	61%	53%	57%	65%	61%
Mean CAFAS Score at Episode Start (SD)*	89(32)	95(26)	92(29)	88(28)	90 (29)
Mean Treatment Episode Length in Days (SD)	267(220)	250(151)	248(203)	237(176)	249(191)
Mean # of MTPS Entries (SD)	9.5(9.3)	8.5(5.0)	8.6(6.8)	8.3(5.8)	8.7(7.1)

Note. *missing data from 20 cases. [1]significant between-group differences (p<.05); within these rows, means sharing a common subscript are not statistically different at $p < .05$

Table 2. *Mean proportion of months each target was selected over a treatment episode in full sample and in internalizing- and externalizing-only cases.*

Treatment Target (ordered by sample-wide endorsement proportion)	**Mean Endorsement Proportions per Episode** Entire Sample (*N*=679)	Internalizing Only (*n*=195)	Externalizing Only (*n*=314)
Positive Peer Interaction	0.582	0.541	0.606
Oppositional or Non-Compliant Behavior	**0.470**	**0.293**	**0.557***
Activity Involvement	0.353	0.348	0.345
Anger	**0.344**	**0.284**	**0.379***
Aggression	**0.261**	**0.127**	**0.342***
Anxiety	**0.209**	**0.312***	**0.142**
Depressed Mood	**0.195**	**0.387***	**0.082**
Peer or Sibling Conflict	**0.185**	**0.145**	**0.210***
Positive Thinking or Attitude	0.172	0.196	0.158
Social Skills	0.153	0.153	0.151
Treatment Engagement	0.152	0.141	0.156
Self-Esteem	**0.152**	**0.193***	**0.103**
Academic Achievement	0.146	0.149	0.135
Contentment or Enjoyment or Happiness	**0.136**	**0.173***	**0.117**
Attention Problems	**0.124**	**0.036**	**0.169***
Self-Injurious Behavior	**0.121**	**0.092**	**0.136***
Phobia or Fears	0.111	0.102	0.106
School Involvement	0.098	0.117	0.093
Avoidance	0.086	0.098	0.074
School Refusal or Truancy	**0.077**	**0.096***	**0.066**
Substance Use	0.075	0.052	0.087
Adjustment to Change	0.074	0.084	0.071
Assertiveness	0.070	0.092	0.061
Hyperactivity	**0.062**	**0.006**	**0.081***
Community Involvement	0.060	0.059	0.066
Runaway	0.057	0.041	0.066
Willful Misconduct or Delinquency	**0.052**	**0.026**	**0.062***
Cognitive-Intellectual Functioning	0.048	0.044	0.044
Other	0.047	0.066	0.049
Peer Involvement	0.046	0.055	0.041
Traumatic Stress	**0.046**	**0.078***	**0.016**
Housing or Living Situation	0.045	0.042	0.043
Empathy	**0.044**	**0.025**	**0.052***

(continued)

Table 2. *Mean proportion of months each target was selected over a treatment episode in full sample and in internalizing- and externalizing-only cases (continued)*

Treatment Target (ordered by sample-wide endorsement proportion)	**Mean Endorsement Proportion per Episode** Entire Sample (*N*=679)	Internalizing Only (*n*=195)	Externalizing Only (*n*=314)
Positive Family Functioning	0.037	0.019	0.038
Grief	**0.036**	**0.069***	**0.023**
Medical Regimen Adherence	0.033	0.049	0.023
Health Management	0.024	0.037	0.019
Adaptive Behavior or Living Skills	0.022	0.024	0.015
Suicidality	**0.022**	**0.045***	**0.005**
(Unclear)	0.018	0.024	0.016
Enuresis or Encopresis	0.017	0.009	0.020
Personal Hygiene	**0.016**	**0.032***	**0.007**
Learning Disorder or Underachievement	0.013	0.002	0.018
Sleep Disturbance or Sleep Hygiene	**0.011**	**0.019***	**0.004**
Shyness	**0.010**	**0.020***	**0.007**
Sexual Variation or Misconduct	0.009	0.010	0.011
Occupational Functioning Or Stress	0.008	0.014	0.007
Eating or Feeding Problems	0.008	0.016	0.004
Pregnancy Education or Adjustment	0.005	0.005	0.005
Speech and Language Problems	0.005	0.004	0.004
(Parenting Skills)	0.003	0.003	0.003
Gender Identity Problems	0.002	0.005	0.001
(Treatment Planning or Framing)	0.002	0.004	0.001
Psychosis	**0.002**	**0.006***	**0.000**
(Safe Environment)	0.002	0.005	0.000
Fire Setting	0.001	0.000	0.002
Mania	0.001	0.000	0.001

Note. The current edition of the MTPS does not include targets in parentheses. "Unclear" indicates that the target could not be determined during data entry. *: Mann Whitney *U* indicated this target is significantly related to internalizing or externalizing diagnoses (range of Mann-Whitney *U* =15570-29925; n_1=195, n_2=314; p <.05).

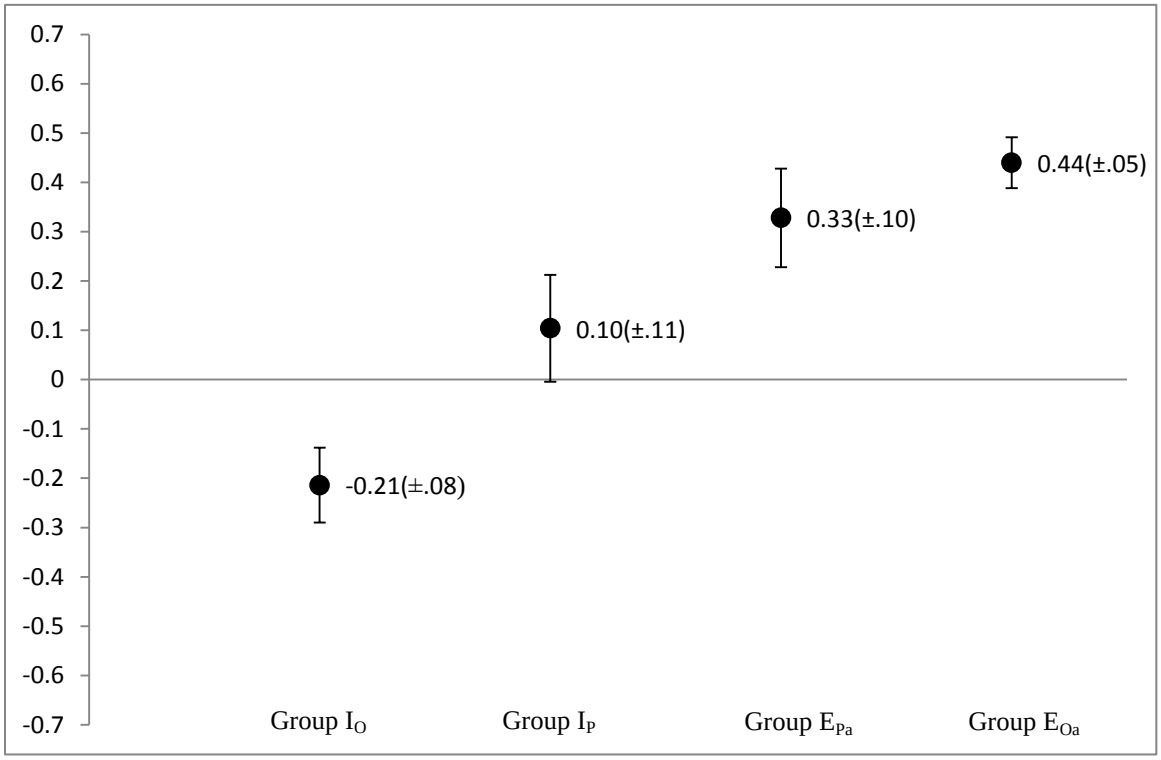
Table 3. *Mean target endorsement proportions across four diagnostic groups*

TREATMENT TARGET	MEAN ENDORSEMENT PROPORTION BY DIAGNOSTIC GROUP			
	I_o	I_p	E_p	E_o
Externalizing Targets				
Willful Misconduct or Delinquency	0.026	0.051	0.071	0.062
Oppositional or Non-Compliant Behavior	0.293	0.500	0.523	0.557
Hyperactivity	0.006	0.089	0.093	0.081
Attention Problems	0.036	0.111	0.166	0.169
Aggression	0.127	0.248	0.275	0.342
Self-Injurious Behavior	0.092	0.127	0.125	0.136
Anger	0.284	0.361	0.341	0.379
Empathy	0.025	0.029	0.070	0.052
Peer or Sibling Conflict	0.145	0.129	0.230	0.210
Internalizing Targets				
Traumatic Stress	0.078	0.095	0.039	0.016
Suicidality	0.045	0.041	0.016	0.005
Self-Management or Self-Control	0.062	0.046	0.036	0.030
Personal Hygiene	0.032	0.013	0.015	0.007
Grief	0.069	0.035	0.016	0.023
Depressed Mood	0.387	0.237	0.138	0.082
Anxiety	0.312	0.309	0.141	0.142
Self-Esteem	0.193	0.238	0.161	0.103
Sleep Disturbance or Sleep Hygiene	0.019	0.017	0.011	0.004
School Refusal or Truancy	0.096	0.081	0.073	0.066
Shyness	0.020	0.003	0.003	0.007
Contentment or Enjoyment or Happiness	0.173	0.157	0.105	0.117
Psychosis	0.006	0.000	0.000	0.000

Note. I_o= Internalizing only; I_p= Internalizing primary; E_p=Externalizing primary; E_o=Externalizing Only.

FIGURES

Figure 1. *Mean I/E scores (±2 SEs) by diagnostic group*



Note. I_o= Internalizing only; I_p= Internalizing primary; E_p=Externalizing primary; E_o=Externalizing Only. Groups sharing a common subscript are not statistically different at $p < .05$

APPENDICES

Appendix A

CAMHD Notice of Privacy Practices

Child and Adolescent Mental Health Division

Notice of Privacy Practices

Effective April 14, 2003

Child and Adolescent Mental Health Division

("CAMHD")

THIS NOTICE EXPLAINS HOW MEDICAL INFORMATION ABOUT YOUR CHILD MAY BE USED AND DISCLOSED. IT ALSO EXPLAINS HOW YOU CAN ACCESS THIS INFORMATION. PLEASE READ IT CAREFULLY.

Understanding Your Child's Protected Health Information:

CAMHD staff and doctors take notes each time your child visits them. They write down what they think is your child's condition and how they plan to care for them. Your child's health record has information that can identify him or her. This kind of information is known as

"Protected Health Information." Your child's name and Social Security number are types of PHI.

If you know what is in the health record you can better protect your child's Protected Health Information ("PHI"). You can also ask how PHI will be used. You can decide if PHI should be disclosed. You can make sure that the health record is accurate.

Our Duties:

CAMHD must:

·Protect the privacy of PHI.

·Tell you about our legal duties.

·Tell you about our privacy practices. You have the right to know how CAMHD uses PHI.

·Abide by this notice.

CAMHD can change its practices at any time. We will mail you a copy of any new notice within 60 days.

CAMHD will ask for your consent before disclosing PHI. CAMHD can disclose PHI without your permission. But any release of PHI will follow the law, as explained in this notice.

Your Child's Health Information Rights:

CAMHD owns your child's health record. However, the information in the record belongs to your child. On behalf of your child you have the right to:

·View or get paper copies of PHI.

·Decide how we send PHI to you. For example, CAMHD usually sends information by mail. You may ask to get PHI by other means, such as fax. You may also ask us to send PHI to another address.

·Ask to limit the use and disclosure of PHI. CAMHD is not required by law to agree to every request.

·Ask for corrections to your child's health record.

·Get an accounting of PHI disclosures.

·Change your mind about allowing use or disclosures of PHI. This does not apply to disclosures that have already happened.

Information that does not identify your child is used for:

·Medical and mental health research.

·Planning and improving services.

·Improving health care.

Examples of Disclosures for Treatment, Payment, and Health Operations:

CAMHD sometimes has to share PHI with other agencies to provide services. CAMHD will only share the minimum necessary PHI with them. We will also require them to protect the PHI they receive.

CAMHD will use and share PHI for the following purposes:

Treatment. For example: A CAMHD professional notes your child's and the treatment team's expectations in the health record. A doctor logs the actions taken and his or her observations. The care coordinator can review your child's record later to see if those goals were met.

***Payment*.** For example: A provider sends a bill to CAMHD. The bill or accompanying materials may contain PHI.

Regular Health Operations. For example: CAMHD staff uses PHI to evaluate treatment outcomes. This helps CAMHD to improve our services.

Other Uses or Disclosures (Permission not Needed):

Business Associates. For example: CAMHD provides some of its services by contract. We may hire an auditor to review financial records. Those records may contain PHI about your child.

***Health Oversight*.** CAMHD may share PHI with certain government oversight agencies. The U.S. Department of Health and Human Services is an example of such an agency.

***Law Enforcement*.** CAMHD may share PHI for law enforcement purposes.

***Coroners, Medical Examiners and Funeral Directors*.** CAMHD may share PHI with

people who need it to do this type of work.

Organ Donation and Disease Registers. CAMHD may share PHI with authorized organ donation and transplantation organizations.

***Research*.** CAMHD may share information with researchers under certain conditions. An Institutional Review Board (IRB) must approve the research project. The IRB will also enforce rules that require researchers to keep PHI private.

***Public Health*.** CAMHD may have to disclose PHI to prevent or control disease, injury, or disability. CAMHD may share PHI with public health authorities for those reasons.

***Correctional institution*.** If your child is at a correctional facility, CAMHD can provide PHI to the facility. We will share PHI with the facility when needed to protect the health and safety of your child and others.

***Victims of Abuse (including Child Abuse), Neglect or Domestic Violence*.** CAMHD is required to report all suspected cases of abuse or neglect. CAMHD must contact the Police or Child Protective Services to make a report. These reports may contain PHI.

***Specialized Government Functions*.** CAMHD may disclose PHI for national security or intelligence purposes. We may disclose PHI to protective services for the President. It may disclose PHI to others as required by law.

Judicial and Administrative Hearings. CAMHD may share PHI in judicial or

administrative hearings. CAMHD will only share PHI after being served with an order of a court or administrative tribunal. CAMHD may also share PHI to respond to lawful processes. Subpoenas are a common type of lawful process.

Other Government Agencies. CAMHD may share PHI with other government agencies if necessary to verify that your child is entitled to other benefits or services.

Family Educational Rights and Privacy Act (FERPA)

Your child's records may also be considered "education records." CAMHD will only disclose information in your child's education records as allowed by FERPA regulations. The Department of Education provides you with your child's FERPA notice.

For More Information or to Report a Problem:

You may contact us if you have other questions or want more information. Please call the CAMHD Privacy Coordinator at (808) 733-8370. You may also write to:

CAMHD Privacy Coordinator
3627 Kilauea Avenue, Suite 101
Honolulu, HI 96816

You can also file a complaint with the U.S. Department of Health and Human Services. You may contact them at:

Office of Civil Rights

Medical Privacy, Complaint Division

U.S. Department of Health and Human Services

200 Independence Avenue, S.W., HHH Bldg., Room 509H

Washington, DC 20201

Phone: (866) 627-7748

TTY: (886) 788-4989

E-mail: www.hhs.gov/ocr

No one will face retaliation for filing a complaint.

My signature below indicates that I have been provided with a copy of the notice of privacy practices.

Name: _____ Child's Name: _____

Signature: _____ Signature: _____

Date: _____ Date: _____

Relationship to child:_____

Effective Date: April 14, 2003.

Distribution: Original to CAMHD.

Copy to Parent/Guardian.

6/03

Appendix B

Monthly Treatment and Progress Summary, Instructions, and Codebook

SERVICE PROVIDER MONTHLY TREATMENT & PROGRESS SUMMARY
Child and Adolescent Mental Health Division (CAMHD)

Instructions: Please complete and electronically submit this form to CAMHD by the 5th working day of each month (summarizing the time period of 1st to the last day of the previous month). The information will be used in service review, monitoring, planning and coordination in accordance with CAMHD policies and standards. Mahalo!

Client Name:	CR #:	DOB:
Month/Year of Services:	Eligibility Status:	Level of Care (one per form):
Axis I Primary Diagnosis:	Axis I Secondary Diagnosis:	Axis I Tertiary Diagnosis:
Axis II Primary Diagnosis:	Axis II Secondary Diagnosis:	

Service Format (circle all that apply):
Individual Group Parent Family Teacher Other: _____

Service Setting (circle all that apply):
Home School Community Out of Home Clinic/Office Other: _____

Service Dates:																

Targets Addressed This Month (*number* up to 10):

	Activity Involvement		Community Involvement		Hyperactivity		Positive Peer Interaction		Shyness
	Academic Achievement		Contentment, Enjoyment, Happiness		Learning Disorder, Underachievement		Phobia/Fears		Sleep Disturbance
	Adaptive Behavior/Living Skills		Depressed Mood		Low Self-Esteem		Positive Thinking/ Attitude		Social Skills
	Adjustment to Change		Eating, Feeding Problems		Mania		Pregnancy Education/ Adjustment		Speech and Language Problems
	Aggression		Empathy		Medical Regimen Adherence		Psychosis		Substance Use
	Anger		Enuresis, Encopresis		Occupational Functioning/Stress		Runaway		Suicidality
	Anxiety		Fire Setting		Oppositional/ Non-Compliant Behavior		School Involvement		Traumatic Stress
	Assertiveness		Gender Identity Problems		Peer Involvement		School Refusal/Truancy		Treatment Engagement
	Attention Problems		Grief		Peer/Sibling Conflict		Self-Control		Willful Misconduct, Delinquency
	Avoidance		Health Management		Personal Hygiene		Self-Injurious Behavior		Other:
	Cognitive-Intellectual Functioning		Housing/Living Situation		Positive Family Functioning		Sexual Misconduct		Other:

CR # _____ (please repeat the number here)

Progress Ratings This Month (check appropriate rating for any target numbers endorsed as targets):

#	Deterioration < 0%	No Significant Changes 0%-10%	Minimal Improvement 11%-30%	Some Improvement 31%-50%	Moderate Improvement 51%-70%	Significant Improvement 71%-90%	Complete Improvement 91%-100%	Date (If Complete)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Intervention Strategies Used This Month (check all that apply):

	Activity Scheduling	Emotional Processing	Line of Sight Supervision	Personal Safety Skills		Stimulus or Antecedent Control
	Assertiveness Training	Exposure	Maintenance or Relapse Prevention	Physical Exercise		Supportive Listening
	Attending	Eye Movement, Tapping	Marital Therapy	Play Therapy		Tangible Rewards
	Behavioral Contracting	Family Engagement	Medication/ Pharmacotherapy	Problem Solving		Therapist Praise/Rewards
	Biofeedback, Neurofeedback	Family Therapy	Mentoring	Psychoeducation, Child		Thought Field Therapy
	Care Coordination	Free Association	Milieu Therapy	Psychoeducation, Parent		Time Out
	Catharsis	Functional Analysis	Mindfulness	Relationship or Rapport Building		Twelve-Step Program
	Cognitive	Goal Setting	Modeling	Relaxation		Other:
	Commands	Guided Imagery	Motivational Interviewing	Response Cost		Other:
	Communication Skills	Hypnosis	Natural and Logical Consequences	Response Prevention		Other:
	Crisis Management	Ignoring/Differential Reinforcement of Other Behavior	Parent Coping	Self-Monitoring		
	Cultural Training	Individual Therapy for Caregiver	Parent/Teacher Monitoring	Self-Reward/ Self-Praise		
	Discrete Trial Training	Insight Building	Parent/Teacher Praise	Skill Building		
	Educational Support	Interpretation	Peer Pairing	Social Skills Training		

CR # _____ **(please repeat the number here)**

Psychiatric Medications (List All)	Total Daily Dose	Dose Schedule	Check if Change	Description of Change
_____	_____	_____	☐	_____
_____	_____	_____	☐	_____
_____	_____	_____	☐	_____
_____	_____	_____	☐	_____
_____	_____	_____	☐	_____

Projected Discharge Date: _____ ☐ **Check if Discharged During Current Month**

IF YOUTH WAS DISCHARGED THIS MONTH, PLEASE COMPLETE ITEMS A & B:

A. Discharge Living Situation (check one):

☐ Home ☐ Foster Home ☐ Group Care ☐ Residential Treatment
☐ Institution/Hospital ☐ Jail/Correctional Facility ☐ Homeless/Shelter ☐ Other:_____

B. Reason(s) for Discharge (check all that apply):

☐ Success/Goals Met ☐ Insufficient Progress ☐ Family Relocation
☐ Runaway/Elopement ☐ Refuse/Withdraw ☐ Eligibility Change ☐ Other:_____

Outcome Measures: Optional. If you have any of the following data, please report the most recent scores:

CAFAS (8 Scales): (1-School:) (2-Home:) (3-Community:) (4-Behavior Toward Others:) (5-Moods/Emotions:) (6-Self-Harm:) (7-Substance:) (8-Thinking:) (Total:)			Date:
CASII/CALOCUS (Total):	CASII/CALOCUS (Level of Care):		Date:
CBCL (Total Problems T):	CBCL (Internalizing T):	CBCL (Externalizing T):	Date:
YSR (Total Problems T):	YSR (Internalizing T):	YSR (Externalizing T):	Date:
TRF (Total Problems T):	TRF (Internalizing T):	TRF (Externalizing T):	Date:
Arrested During Month? (Y/N):	School attendance (% of days):		

Comments/Suggestions (***attach additional sheets if necessary***):

Provider Agency & Island: _____	Clinician Name and ID#: _____
Provider Supervisor Signature: _____	Clinician Signature: _____
Submitted to CAMHD (date): _____	Care Coordinator: _____

DOH Child and Adolescent Mental Health Division
Instructions and Codebook for Provider Monthly Treatment and Progress Summary
Effective July 1, 2008

The instructions and codebook are to be used in conjunction with the CAMHD Service Provider Monthly Treatment and Progress Summary form. This codebook defines the numerous terms and possible responses necessary to accurately complete the form. For questions regarding these definitions or the use of the Monthly Treatment and Progress Summary, please contact the Clinical Services Office at 733-9349.

Instructions

Please complete and electronically submit to CAMHD the Monthly Treatment and Progress Summary by the 5th working day of the month. The summary should pertain to the previous month's services. This form should be completed by the clinician who is most familiar with the current status of the youth and family and with the services provided during the month. When necessary, the responding clinician should gather information from other provider team members to assure the most accurate description possible. Once completed by the clinician, the form should be reviewed and signed by a qualified supervisor.

At the top section, please write the Client Name, CR Number, Date of Birth (DOB), Home School, School Complex, Eligibility Status [i.e., Educationally Supportive (IDEA), Support for Emotional and Behavioral Development (SEBD), Mental Health Only], Axis I Primary Diagnosis, Axis I Secondary Diagnosis, Axis I Tertiary Diagnosis, Axis II Primary Diagnosis, Axis II Secondary Diagnosis, Level of Care, and Month/Year of Services. If some Diagnosis fields do not apply to the youth, please leave those fields blank. The Month/Year of Services refers to the month in which the service was provided, not the date the Monthly Provider Summary was completed. For example, if the report is submitted in the first week of June, the Month/Year of Services would read "May," because the services were delivered in May. For youth receiving more than one level of care during the month, please complete a separate form for each.

Under Service Format, please indicate whether services were delivered in the following manner (more than one format can be selected):

Individual –Working with youth directly
Group –Working with youth along with other youths receiving services
Parent –Working directly with parents or caregivers, with youth not present
Family – Working with parents or caregivers and youth together. Can include other family members
Teacher – Working with a teacher directly
Other – Another format not specified above; please write description

Under Service Setting, please note whether services were delivered in the following locations (more than one setting can be selected):

Home –Working with youth or family members in the youth's home
School –Working with youth or professionals in the youth's educational setting, other than in the context of an IEP/MP meeting
Community – Working with youth or others in the youth's community/neighborhood
Out of Home – Working with the youth or family in a residential facility
Clinic/Office – Working with the youth or family in a clinical office
Other – Another setting not specified above; please write description

For Service Dates, please provide the dates for each service provided during that month. If additional space is required, please continue writing dates in the area below the boxes provided. If the service was provided out of home (i.e., continuously), please provide start and end dates for that month's services and put the word "to" in between in one of the boxes.

Targets

Targets are the strengths and needs being addressed as part of the mental health services for that youth.

When completing the Targets Addressed This Month, please put numbers (1, 2, 3…) rather than checkmarks (X, ✔) to the left of each target addressed. This is so that progress ratings in the next section can be attached to each target. For example, if "Academic Achievement" was targeted, place a "1" in the box to the left of that target on the form. Numbers do not need to reflect any particular order. If more than 10 targets were addressed during the month, please provide only those you feel are the 10 most important. If a target was addressed for which there is no option, please number the "other" box, and write in the target.

The list of treatment targets is intended to provide a summary of strengths and needs that are commonly targeted for change during mental health service provision. These problem areas are NOT diagnostic descriptions and the primary targets for treatment may change over time for a particular youth. For example, when treating a youth with an eating disorder, treatment may target eating/feeding behavior at one point, but target medical regimen adherence or positive family functioning on other occasions. These treatment targets are for progress summary purposes and should NOT replace the detailed specification of goals and objectives as part of the treatment planning process.

Definitions of Targets

1. **Academic Achievement** – Issues related to general level or quality of achievement in an educational or academic context. This commonly includes performance in coursework, and excludes cognitive-intellectual ability/capacity issues (#11) and specific challenges in learning or achievement (#24)
2. **Activity Involvement** – Issues related to general engagement and participation in activities. Only code here those activities that are not better described by the particular activity classes of school involvement (#40), peer involvement (#30), or community involvement (#12).
3. **Adaptive Behavior/Living Skills** – Skills related to independent living, social functioning, financial management, and self-sufficiency that are not better captured under other codes

such as personal hygiene (#33), self-management/self-control (#43), social skills (#47), housing/living situation (#22), or occupational functioning/stress (#28).

4. **Adjustment to Change** – Issues related to a youth's global response to a life transition or specific challenge (e.g., change of school, living situation, treatment transition or discharge, etc.).
5. **Aggression** – Verbal and/or physical aggression, or threat thereof, that results in intimidation, physical harm, or property destruction.
6. **Anger** – Emotional experience or expression of agitation or destructiveness directed at a particular object or individual. Common physical feelings include accelerated heartbeat, muscle tension, quicker breathing, and feeling hot.
7. **Anxiety** – A general uneasiness that can be characterized by irrational fears, panic, tension, physical symptoms, excessive anxiety, worry, or fear.
8. **Assertiveness** – The skills or effectiveness of clearly communicating one's wishes. For example, the effectiveness with which a child refuses unreasonable requests from others, expresses his/her rights in a non-aggressive manner, and/or negotiates to get what s/he wants in their relationships with others.
9. **Attention Problems** – Described by short attention span, difficulty sustaining attention on a consistent basis, and susceptible to distraction by extraneous stimuli.
10. **Avoidance** – Behaviors aimed at escaping or preventing exposure to a particular situation or stimulus.

11. **Cognitive-Intellectual Functioning** – Issues related to cognitive-intellectual ability/capacity and use of those abilities for positive adaptation to the environment. This includes efforts to increase IQ, memory capacity, or abstract problem-solving ability.
12. **Community Involvement** – Issues related to the amount of involvement in specific community activities within the child's day.
13. **Contentment/Enjoyment/Happiness** – Refers to issues involving the experience and expression of satisfaction, joy, pleasure, and optimism for the future.
14. **Depressed Mood** – Behaviors that can be described as persistent sadness, anxiety, or "empty" mood, feelings of hopelessness, guilt, worthlessness, helplessness, decreased energy, fatigue, etc.
15. **Eating/Feeding Problems**– Knowledge or behaviors involved with the ingestion or consumption of food. May include nutritional awareness, food choice, feeding mechanics (e.g., swallowing, gagging, etc.), and social factors relating with eating situations.
16. **Empathy** – Identifications with and understanding of another person's situation, feelings, and motives.
17. **Enuresis/Encopresis** – Enuresis refers to the repeated pattern of voluntarily or involuntarily passing urine at inappropriate places during the day or at night in bed or clothes. Encopresis refers to a repeated pattern of voluntarily or involuntarily passing feces in inappropriate places.
18. **Fire Setting** – Intentionally igniting fires.
19. **Gender Identity Problems** – Issues related with a youth's self-concept or self-understanding involving gender roles and social behaviors in relation to their biological sex. This does not address self-concept issues involving sexual orientation, which would be coded as "other."
20. **Grief** – Feelings associated with a loss of contact with a significant person in the youth's environment (e.g., parent, guardian, friend, etc.).

21. **Health Management** – Issues related to the improvement or management of one's health, inclusive of both physical illness and fitness. In addition to dealing with the general development of health-oriented behavior and management of health conditions, this target can also focus on exercise or lack of exercise.
22. **Housing/Living Situation** – Refers to finding or stabilizing an appropriate living situation for a youth.
23. **Hyperactivity** – Can be described by fidgeting, squirming in seat, inability to remain seated, talking excessively, difficulty engaging in leisure activities quietly, etc.
24. **Learning Disorder, Underachievement** – Refers to specific challenges with learning or educational performance that are not better accounted for by cognitive-intellectual functioning (#11) or general academic achievement (#1).
25. **Low Self-Esteem** – An inability to identify or accept his/her positive traits or talents, and accept compliments. Verbalization of self-disparaging remarks and viewing him or herself in a negative manner.
26. **Mania** – An inflated self-perception that can be manifested by loud, overly friendly social style that oversteps social boundaries, and high energy and restlessness with a reduced need for sleep.
27. **Medical Regimen Adherence** – Knowledge, attitudes, and behaviors related to regular implementation procedures prescribed by a health care professional. Commonly include lifestyle behaviors (e.g., exercise, nutrition), taking medication, or self-administration of routine assessments (e.g., taking blood samples in a diabetic regimen).
28. **Occupational Functioning/Stress** – Issues related to career interests, seeking employment, obtaining work permits, job performance, or managing job stress or strain that are not better characterized under other targets (e.g., anxiety).
29. **Oppositional/Non-Compliant Behavior** – Behaviors that can be described as refusal to follow adult requests or demands or established rules and procedures (e.g., classroom rules, school rules, etc.).

30. **Peer Involvement** – A greater involvement in activities with peers. Activities could range from academic tasks to recreational activities while involvement could range from working next to a peer to initiating an activity with a peer.
31. **Peer/Sibling Conflict** – Peer and/or sibling relationships that are characterized by fighting, bullying, defiance, revenge, taunting, incessant teasing and other inappropriate behaviors.
32. **Phobia/Fears** – Irrational dread, fear, and avoidance of an object, situation, or activity.
33. **Personal Hygiene** – Challenges related to self-care and grooming.
34. **Positive Family Functioning** – Issues related with healthy communication, problem-solving, shared pleasurable activities, physical and emotional support, etc. in the context of an interaction among multiple persons in a family relation, broadly defined.
35. **Positive Peer Interaction** – Social interaction and communication with peers that are pro-social and appropriate. This differs from peer involvement (#30) in that it focuses on interactional behavior, styles, and intentions, whereas peer involvement targets actual engagement in activities with peers regardless of interactional processes.
36. **Positive Thinking/Attitude** – This target involves clear, healthy, or optimistic thinking, and involves the absence of distortions or cognitive bias that might lead to maladaptive behavior.
37. **Pregnancy Education/Adjustment** – Issues related to helping a pregnant youth prepare and adjust to parenthood.

38. **Psychosis** – Issues related to atypical thought content (delusions of grandeur, persecution, reference, influence, control, somatic sensations), and/or auditory or visual hallucinations.
39. **Runaway** – Running away from home or current residential placement for a day or more.
40. **School Involvement** – Detailed description of amount of involvement in specific school activities within the child's scheduled school day.
41. **School Refusal/Truancy** – Reluctance or refusal to attend school without adult permission for the absence. May be associated with school phobia or fear manifested by frequent somatic complaints associated with attending school or in anticipation of school attendance, or willful avoidance of school in the interest of pursuing other activities.
42. **Self-Injurious Behavior** – Acts of harm, violence, or aggression directed at oneself.
43. **Self-Management/Self-Control** – Issues related to management, regulation, and monitoring of one's own behavior.
44. **Sexual Misconduct** – Issues related with sexual conduct that is defined as inappropriate by the youth's social environment or that includes intrusion upon or violation of the rights of others.
45. **Shyness** – Social isolation and/or excessive involvement in isolated activities. Extremely limited or no close friendships outside the immediate family members. Excessive shrinking or avoidance of contact with unfamiliar people.
46. **Sleep Disturbance** – Difficulty getting to or maintaining sleep.
47. **Social Skills** – Skills for managing interpersonal interactions successfully. Can include body language, verbal tone, assertiveness, and listening skills, among other areas.
48. **Speech and Language Problems** – Expressive and/or receptive language abilities substantially below expected levels as measured by standardized tests.
49. **Substance Abuse/Substance Use** – Issues related to the use or misuse of a common, prescribed, or illicit substances for altering mental or emotional experience or functioning.
50. **Suicidality** – Issues related to recurrent thoughts, gestures, or attempts to end one's life.
51. **Traumatic Stress** – Issues related to the experience or witnessing of life events involving actual or threatened death or serious injury to which the youth responded with intense fear, helplessness, or horror.

52. **Treatment Engagement** – The degree to which a family or youth is interested and optimistic about an intervention or plan, such that they act willfully to participate and work toward the success of the plan.
53. **Willful Misconduct/Delinquency** – Persistent failure to comply with rules or expectations in the home, school, or community. Excessive fighting, intimidation of others, cruelty or violence toward people or animals, and/or destruction of property.

Progress Ratings

Please provide a single progress rating for each target selected above (up to 10). Numbers 1 through 10 in the left column refer to the targets selected in the Targets Addressed This Month section above. For example, had you selected "Academic Achievement" above, there would be a "1" in the box to the left of that target on that section. Then, the first row of the Progress Ratings, labeled "1," is where you would note the progress ratings associated with academic achievement.

Please place a mark (X, ✓) in the column corresponding to your subjective rating of progress associated with this target. When possible, your overall subjective ratings should be informed by

a review of objective measures such as any available and relevant questionnaires or behavioral observation data. For example, if a youth receives a T-score of 70 during an intake assessment and the treatment goal is to reduce this score to 60, then if a youth receives a T-score of 65 during a monthly assessment, than 50% progress may be reported [i.e., 70 – 65 / 70 – 60 = 5 / 10 = 50%]. Or if a youth gets into 10 fights per week initially and the treatment goal is to reduce fighting to 0 fights per week, then during a month in which the youth was fighting only 3 times per week, that would reflect 70% progress [i.e., 10 – 3 / 10 – 0 = 7 / 10 = 70%].

Anchors refer to changes from baseline or beginning of services for that target. Thus, a youth who had reached 90% of an initial goal would receive a rating of "significant improvement." If that progress were to decline to 70% in the following month, the youth would then get a rating of "moderate improvement" for that target for that month (not "deterioration"). "Deterioration" refers to when a target gets worse from the time it was initially addressed. If there is a break in addressing a specific target (e.g., a target is addressed, then not addressed for a month, then addressed again in a later month), use the initial baseline from the first time as the point of comparison. Only when there is a break in the complete episode of care (i.e., discharge followed by later admission), should that reset the baseline for a given target.

If a goal is reached (improvement is complete), the provider may choose to note the date in the rightmost column. This implies that the target is no longer being addressed. Targets that are not complete should be rated again on the following month's summary form.

Intervention Strategies

Please place a mark (X, ✓) to the left of any intervention strategies used during the past month. There is no limit to how many may be checked. If strategies were employed that are not in the following list of definitions, please mark the "other" box and write in the strategy used.

Definitions of Intervention Strategies

1. **Activity Scheduling** – The assignment or request that a child participate in specific activities outside of therapy time, with the goal of promoting or maintaining involvement in satisfying and enriching experiences.
2. **Assertiveness Training** – Exercises or techniques designed to promote the child's ability to be assertive with others, usually involving rehearsal of assertive interactions.
3. **Attending** – Exercises involving the youth and caregiver playing together in a specific manner to facilitate their improved verbal communication and nonverbal interaction. Can involve the caregiver's imitation and participation in the youth's activity, as well as parent-directed play (previously called "Directed Play").
4. **Behavioral Contracting** – Development of a formal agreement specifying rules, consequences, and a commitment by the youth and relevant others to honor the content of the agreement.
5. **Biofeedback/ Neurofeedback** – Strategies to provide information about physiological activity that is typically below the threshold of perception, often involving the use of specialized equipment.

6. **Care Coordination** – Coordinating among the youth's service providers to ensure effective communication, receipt of appropriate services, adequate housing, etc.
7. **Catharsis** – Strategies designed to bring about the release of intense emotions, with the intent to develop mastery of affect and conflict.
8. **Cognitive** – Any techniques designed to alter interpretation of events through examination of the child's reported thoughts, typically through the generation and rehearsal of alternative counter-statements. This can sometimes be accompanied by exercises designed to comparatively test the validity of the original thoughts and the alternative thoughts through the gathering or review of relevant information.
9. **Commands** – Training for caregivers in how to give directions and commands in such a manner as to increase the likelihood of child compliance.
10. **Communication Skills** – Training for youth or caregivers in how to communicate more effectively with others to increase consistency and minimize stress. Can include a variety of specific communication strategies (e.g., active listening, "I" statements).

11. **Crisis Management** – Immediate problem solving approaches to handle urgent or dangerous events. This might involve defusing an escalating pattern of behavior and emotions either in person or by telephone, and is typically accompanied by debriefing and follow-up planning.
12. **Cultural Training** – Education or interaction with culturally important values, rituals, or sites with no specific practices identified.
13. **Discrete Trial Training** – A method of teaching involving breaking a task into many small steps and rehearsing these steps repeatedly with prompts and a high rate of reinforcement.
14. **Educational Support** – Exercises designed to assist the child with specific academic problems, such as homework or study skills. This includes tutoring.
15. **Emotional Processing** – A program based on an information processing model of emotion that requires activation of emotional memories in conjunction with new and incompatible information about those memories.
16. **Exposure** – Techniques or exercises that involve direct or imagined experience with a target stimulus, whether performed gradually or suddenly, and with or without the therapist's elaboration or intensification of the meaning of the stimulus.
17. **Eye Movement/ Tapping** – A method in which the youth is guided through a procedure to access and resolve troubling experiences and emotions, while being exposed to a therapeutic visual or tactile stimulus designed to facilitate bilateral brain activity.
18. **Family Engagement** – The use of skills and strategies to facilitate family or child's positive interest in participation in an intervention.
19. **Family Therapy** – A set of approaches designed to shift patterns of relationships and interactions within a family, typically involving interaction and exercises with the youth, the caregivers, and sometimes siblings.
20. **Free Association** – Technique for probing the unconscious in which a person recites a running commentary of thoughts and feelings as they occur.

21. **Functional Analysis** – Arrangement of antecedents and consequences based on a functional understanding of a youth's behavior. This goes beyond straightforward application of other behavioral techniques.
22. **Goal Setting** – Setting specific goals and developing commitment from youth or family to attempt to achieve those goals (e.g., academic, career, etc.).

23. **Guided Imagery** – Visualization or guided imaginal techniques for the purpose of mental rehearsal of successful performance. Guided imagery for the purpose of physical relaxation (e.g., picturing calm scenery) is not coded here, but rather coded under relaxation (#50).
24. **Hypnosis** – The induction of a trance-like mental state achieved through suggestion.
25. **Ignoring/Differential Reinforcement of Other Behavior** – The training of parents or others involved in the social ecology of the child to selectively ignore mild target behaviors and selectively attend to alternative behaviors.
26. **Individual Therapy for Caregiver** – Any therapy designed directly to target individual (non-dyadic) psychopathology in one or more of the youth's caregivers. If the therapy for caregivers involves marital therapy (#31) or communication skills (#10) those are not coded here, unless there are additional services for individual caregiver psychopathology, in which case all that apply should be coded.
27. **Insight Building** – Activity designed to help a youth achieve greater self-understanding.
28. **Interpretation** – Reflective discussion or listening exercises with the child designed to yield therapeutic interpretations. This does not involve targeting specific thoughts and their alternatives, which would be coded as cognitive/coping.
29. **Line of Sight Supervision** – Direct observation of a youth for the purpose of assuring safe and appropriate behavior.
30. **Maintenance/Relapse Prevention** – Exercises and training designed to consolidate skills already developed and to anticipate future challenges, with the overall goal to minimize the chance that gains will be lost in the future
31. **Marital Therapy** – Techniques used to improve the quality of the relationship between caregivers.
32. **Medication/ Pharmacotherapy** – Any use of psychotropic medication to manage emotional, behavioral, or psychiatric symptoms.
33. **Mentoring** – Pairing with a more senior and experienced individual who serves as a positive role model for the identified youth.
34. **Milieu Therapy** – A therapeutic approach in residential settings that involves making the environment itself part of the therapeutic program. Often involves a system of privileges and restrictions such as a token or point system.
35. **Mindfulness** – Exercises designed to facilitate present-focused, non-evaluative observation of experiences as they occur, with a strong emphasis of being "in the moment." This can involve the youth's conscious observation of feelings, thoughts, or situations.
36. **Modeling** – Demonstration of a desired behavior by a therapist, confederates, peers, or other actors to promote the imitation and subsequent performance of that behavior by the identified youth.

37. **Motivational Interviewing** – Exercises designed to increase readiness to participate in additional therapeutic activity or programs. These can involve cost-benefit analysis, persuasion, or a variety of other approaches.
38. **Natural and Logical Consequences** – Training for parents or teachers in (a) allowing youth to experience the negative consequences of poor decisions or unwanted behaviors, or (b) delivering consequences in a manner that is appropriate for the behavior performed by the youth.
39. **Parent Coping** – Exercises or strategies designed to enhance caregivers' ability to deal with stressful situations, inclusive of formal interventions targeting one or more caregiver.
40. **Parent/Teacher Monitoring** – The repeated measurement of some target index by the parent, teacher, or other adult involved in the child's social ecology.
41. **Parent/Teacher Praise** – The training of parents, teachers, or other adults involved in the social ecology of the child in the administration of social rewards to promote desired behaviors. This can involve praise, encouragement, affection, or physical proximity.
42. **Peer Pairing** – Pairing with another youth of same or similar age to allow for reciprocal learning or skills practice.
43. **Personal Safety Skills** – Training for the youth in how to maintain personal safety of one's physical self. This can include education about attending to one's sense of danger, body ownership issues (e.g., "good touch-bad touch"), risks involved with keeping secrets, how to ask for help when feeling unsafe, and identification of other high-risk situations for abuse.
44. **Physical Exercise** – The engagement of the youth in energetic physical movements to promote strength or endurance or both. Examples can include running, swimming, weight-lifting, karate, soccer, etc. Note that when the focus of the physical exercise is also to produce talents or competence and not just physical activity and conditioning, the code for "Skill Building" (#55) can also be applied.
45. **Play Therapy** – The use of play as a primary strategy in therapeutic activities. This may include the use of play as a strategy for clinical interpretation. Different from Attending (#3), which involves a specific focus on modifying parent-child communication. This is also different from play designed specifically to build relationship quality (#49).
46. **Problem Solving** – Techniques, discussions, or activities designed to bring about solutions to targeted problems, usually with the intention of imparting a skill for how to approach and solve future problems in a similar manner.
47. **Psychoeducational-Child** – The formal review of information with the child about the development of a problem and its relation to a proposed intervention.
48. **Psychoeducational-Parent** – The formal review of information with the caregiver(s) about the development of the child's problem and its relation to a proposed intervention. This often involves an emphasis on the caregiver's role in either or both.
49. **Relationship/Rapport Building** – Strategies in which the immediate aim is to increase the quality of the relationship between the youth and the therapist. Can include play, talking, games, or other activities.

50. **Relaxation** – Techniques or exercises designed to induce physiological calming, including muscle relaxation, breathing exercises, meditation, and similar activities. Guided imagery exclusively for the purpose of physical relaxation is also coded here.
51. **Response Cost** – Training parents or teachers how to use a point or token system in which negative behaviors result in the loss of points or tokens for the youth.
52. **Response Prevention** – Explicit prevention of a maladaptive behavior that typically occurs habitually or in response to emotional or physical discomfort.
53. **Self-Monitoring** – The repeated measurement of some target index by the child.
54. **Self-Reward/Self-Praise** – Techniques designed to encourage the youth to self-administer positive consequences contingent on performance of target behaviors.
55. **Skill Building** – The practice or assignment to practice or participate in activities with the intention of building and promoting talents and competencies.
56. **Social Skills Training** – Providing information and feedback to improve interpersonal verbal and non-verbal functioning, which may include direct rehearsal of the skills. If this is paired with peer pairing (#42), that should be coded as well.
57. **Stimulus/Antecedent Control** – Strategies to identify specific triggers for problem behaviors and to alter or eliminate those triggers in order to reduce or eliminate the behavior.
58. **Supportive Listening** – Reflective discussion with the child designed to demonstrate warmth, empathy, and positive regard, without suggesting solutions or alternative interpretations.
59. **Tangible Rewards** – The training of parents or others involved in the social ecology of the child in the administration of tangible rewards to promote desired behaviors. This can involve tokens, charts, or record keeping, in addition to first-order reinforcers.
60. **Therapist Praise/Rewards** – The administration of tangible (i.e., rewards) or social (e.g., praise) reinforcers by the therapist.
61. **Thought Field Therapy** – Techniques involving the tapping of various parts of the body in particular sequences or "algorithms" in order to correct unbalanced energies, known as thought fields.
62. **Time Out** – The training of or the direct use of a technique involving removing the youth from all reinforcement for a specified period of time following the performance of an identified, unwanted behavior.
63. **Twelve-Step Program** – Any programs that involve the twelve-step model for gaining control over problem behavior, most typically in the context of alcohol and substance use, but can be used to target other behaviors as well.

For medication interventions please list each psychiatric medication the youth is taking (e.g., Adderall ER), describe the prescribed total daily dose for each medication (e.g., 30 mg,), identify the prescribed dose schedule (e.g., 2x/week, 3x/day, 15-10-5/day, etc.), place a check mark in the appropriate box if there was a change in the medication or regimen during the reporting month, and provide a description of the change on the line to the right (e.g., new medication, daily dosage change from 10 to 30 mg, change in dose schedule from 5-5/day to 10-10-10/day, etc.).

CAMHD Provider Monthly Summary Instructions and Codebook

For Projected End Date, please indicate the expected date for termination of the services for which this form was completed.

For Discharged During Month please indicate if the youth was discharged from your program during the reporting month. If the youth was discharged, please indicate the Living Situation that the youth was entering upon discharge and the Reason for Discharge. For Projected End Date, please indicate the expected date for termination of the services for which this form was completed.

Living Situation upon Discharge

Please place a mark (X, ✔) to the left of statement that best describes the type of living environment in which the youth was expected to reside at the time of discharge. Please select only one option. If the youth's living situation at discharge is not well described by the following list of definitions, please mark the "other" box and write in the youth's living situation.

1. **Home** - Youth to live in a house, apartment, trailer, hotel, dorm, barrack, and/or single room occupancy. This excludes situations better characterized as foster homes.
2. **Foster Home**-Youth to reside in a foster home or therapeutic foster home. A foster home is a home that is licensed to provide foster care to children, adolescents, and/or adults.
3. **Group Care**-Youth to reside in a group care facility. This level of care may include a group home, therapeutic group home, or board and care. This excludes community-based residential and hospital-based residential care
4. **Residential Treatment**- Youth to reside in a community-based residential treatment, rehabilitation center, or other residential treatment that is not better characterized as a group home or institution/hospital facility. An organization, not licensed as a psychiatric hospital, whose primary purpose is the provision of individually planned programs of mental health treatment services in conjunction with residential care for children and youth. The services are provided in facilities that are certified by state or federal agencies or through a national accrediting agency.
5. **Institutional/Hospital**-Youth resides in an institutional care or hospital-based residential care facility with care provided on a 24 hour, 7 day a week basis. This level of care may include a skilled nursing/intermediate care facility, nursing homes, institutes of mental disease, inpatient psychiatric hospital, psychiatric health facility, Veterans Affairs hospital, or state hospital.
6. **Jail/Correctional Facility**-Youth resides in a Jail and/or Correctional facility with care provided on a 24 hour, 7 day a week basis. This level of care may include a jail, correctional facility, detention centers, prison, youth authority facility, juvenile hall, boot camp, or boys ranch.
7. **Homeless/Shelter**- A youth is considered homeless if s/he lacks a fixed, regular, and adequate nighttime residence or his/her primary nighttime residency is a supervised publicly or privately operated shelter designed to provide temporary living accommodations, an institution that provides a temporary residence for individuals intended to be institutionalized, or a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings (e.g., on the street). Youth who were discharged due to extended runaway or elopement episode should be recorded in this category.

CAMHD Provider Monthly Summary Instructions and Codebook

Reason(s) for Discharge

Please place a mark (X, ✔) to the left of each statement that describes the reasons for discharging youth from the program during the reporting month. There is no limit to how many may be checked. If the discharge reason is not well characterized by the following list of definitions, please mark the "other" box and write in the reason.

1. **Success/Goals Met**-Youth was clinically discharged due to sufficient treatment progress (e.g., symptoms reduced, functioning improved), treatment goals were met, youth was evaluated and services were determined unnecessary, services were completed, or youth was moving to a less restrictive and intensive level of care.
2. **Insufficient Progress**-Youth was discharged from service without showing sufficient treatment progress to be judged as clinically successful (i.e., little symptom reduction, improvement in functioning, or goal attainment was achieved).
3. **Family Relocation**-Youth was discharge because the youth and family moved out of state or out of the service area.
4. **Runaway/Elopement**-Youth was discharged in association with an extended period of unavailability for treatment because the youth had runaway from home or eloped from the program.
5. **Refuse/Withdraw**-Youth was discharged due to parental refusal, non-participation in treatment, lack of consent, or other indication that client withdrew from services against professional advice.
6. **Eligibility Change**-Youth was discharged in association with a change in eligibility for services, such as a termination of a court order or commitment, aging out of child and adolescent services, loss of Medicaid insurance, etc.

Please provide any other Comments or Suggestions for the youth's care coordinator you think would be important.

If scores are available on any of the Outcome Measures recommended in the Interagency Practice Guidelines, please provide them along with dates in the optional section provided. Include whether or not youth was arrested during the past month, and an estimate of the percentage of school days that were attended. If school is attended in a residential setting, this counts toward the percentage of days attended.

For the CAFAS, the numbered spaces refer to the following scales: 1-School, 2-Home, 3-Community, 4-Behavior Towards Others, 5-Moods/Emotions, 6-Self-Harm, 7-Substance, 8-Thinking. "Total" refers to the sum of these 8 scales.

Please write the name of the agency including location (e.g., Maui, Big Island) and name of the clinicians (along with CAMHMIS ID#) and provider, along with appropriate signatures of the clinician completing the form and the qualified supervisor. Note the date that the form was submitted electronically to CAMHD and provide name of Care Coordinator.

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