



## MENTAL HEALTH THERAPEUTIC SERVICES REPORT ON CHILD BEHAVIOR CHECK LIST (CBCL)

As of March 1, 2011 (Report prepared on May 23, 2012)

**Purpose:**

To investigate whether participation in the MHTS program was associated with a significant decrease in externalizing (under-control) and internalizing (over-control) problems.

**Source of information:**

115 of the 143 client cases had CBCL assessments at both intake and annual/exit, completed by the same person or persons with similar relationships to the child, such as mother at both time points, therapist with mother at intake and mother at exit, or therapist at intake and therapist and adoptive mother at exit. Dates of intake ranged from 8/15//2007- 6/8/2011. The sample included 75 boys and 40 girls. The total number of cases from each agency was 83 for ECMH, 7 for Lynn Center, and 25 for We Care.

Figure 1. Average child age at program entry and therapeutic dose

	Average	Range
Child age at intake	49 months	15-79 months
Therapeutic dose (time between observations)	10.6 months	4 to 25 months

**Evidence of Symptom Improvement:**

The CBCL ranks children’s behavior according to severity compared to other children of the same age. Thus, percentile rankings tell us how a child (or children) compare to the general population along a set of measures. A percentile rank of 75 indicates that approximately 25% of children the same age demonstrate problems that are more severe. Average CBCL rankings across all children in this sample indicate that children are exhibiting more troubled behavior than average for their age. In addition, significant declines in percentile rank between assessments indicates that participation in the MHTS program is associated with symptom improvement (except for Somatic Complaints; see statistical significance column below).

Figure 2. CBCL percentile ranking of all children by scale over time

Scales and Subscales	Percentile Rank (1-100)		Change	Statistical Significance	# of children
	Intake	Annual/Exit			
<b>Syndromes</b>					
Internalizing	77	67	10	**	115
Emotionally Reactive	77	72	5	*	99
Anxious/Depressed	76	73	3	*	115
Somatic Complaints	69	67	2	<i>ns</i>	115
Withdrawn	80	75	6	**	115
Externalizing	78	68	10	**	115
Aggressive Behavior	82	74	8	**	115
Attention Problems	78	72	6	**	115
Sleep Problems	70	66	4	*	99
Total Problems	79	68	11	**	115
<b>DSM IV Codes</b>					
Affective Problems	75	71	4	*	115
Anxiety Problems	76	71	4	*	115
Pervasive Developmental Problems	82	76	6	**	101
Attention Deficit Hyperactivity Problems	75	70	5	*	115
Oppositional / Defiant Problems	78	73	5	*	115

*\*\*Improvement is highly significant (p<.01)*

*\*Improvement is significant (p<.05)*

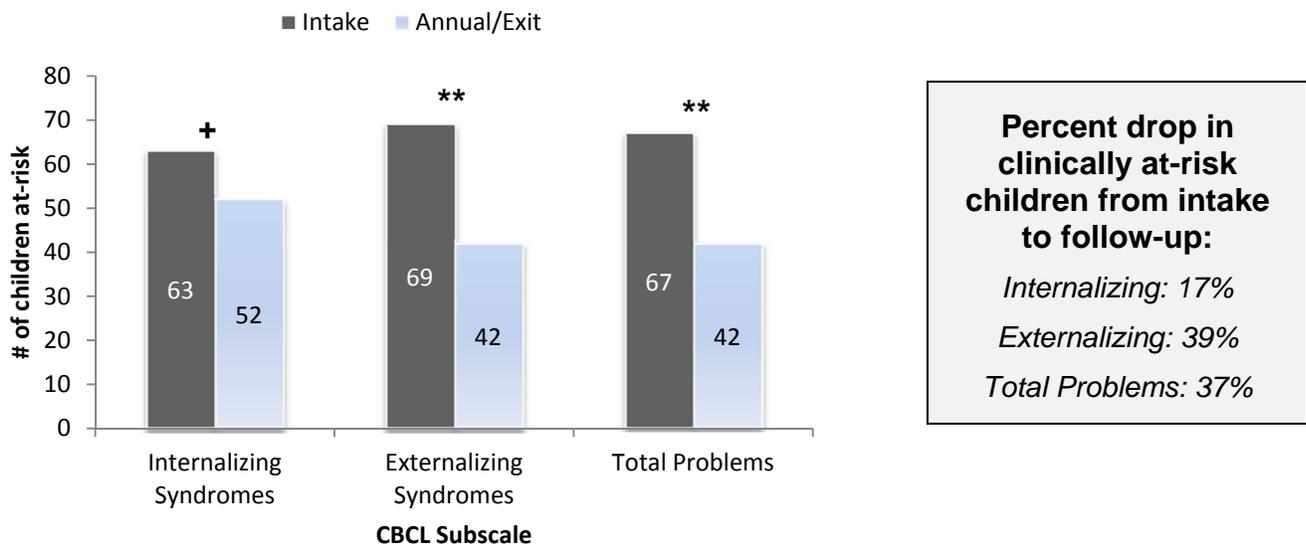
*ns= result is not significant*

### Evidence of Abatement:

CBCL rankings are best utilized as indicators of clinical risk because the scoring system is validated based on children score who have (or have not) received clinical diagnoses. The CBCL authors established clinical cutoff scores to categorize children's problem behavior according to risk level: low (Normative), moderate (Borderline Clinical), or high (Clinical). Children who score at or near the clinical cutoff on a subscale are more likely to have or develop clinically significant problems. Thus, a change in risk status from clinical (or borderline clinical) to normative is indicative of clinical risk/problem abatement.

Approximately 60% of the 115 children assessed scored as 'Borderline Clinical' or 'Clinical' at program intake. The number of children in these risk categories at intake and follow-up are displayed in Figure 3. The drop in the number of at-risk children at follow-up was highly significant for both Externalizing (39% drop) and Total Problem Syndromes (37% drop) and was strongly suggestive for Internalizing Syndromes (17% drop). These results indicate that program participation is strongly associated with the successful remediation of mental-health-related issues among clinically at-risk children and their families.

Figure 3. Number of children who are 'at-risk' at intake and at follow-up



\*\* Highly significant difference ( $p < .01$ ); + Near statistical significance ( $p < .06$ )

### Data Collection Recommendation:

Encourage all therapists to use ADM to enter CBCL data and make it available for analysis and reporting. Try to have the same respondent fill out the pre and post CBCL whenever possible so that the data can be used for these analyses.

### Subscale Definitions:

The CBCL is a validated and frequently used instrument of 100 items that can cluster into several syndromes and DSM-IV codes (see Figure 4 for descriptions). CBCL syndromes represent collections of symptoms that also correlate with DSM-IV diagnoses. In general terms, internalizing syndromes represent inappropriate or maladaptive efforts to control how one feels, thinks, or acts. These problems are often termed 'secret illnesses' because they develop and are maintained within the individual. Externalizing syndromes represent a collection of behavioral and emotional problems that typically occur due to under-control or poor regulation of actions and feelings. Total Syndrome scores represent a combination of both internalizing, externalizing, and other subscales. DSM-IV scores are closely matched with diagnostic criteria for DSM-IV clinical disorder codes.

Figure 3. Syndrome and DSM-IV Definitions with examples

<b>Syndromes:</b> Examples of typical problems by syndrome subcategory.	
Internalizing Syndromes	
Emotionally Reactive	Twitching, sulking, whining, worry, panic, rapid shifts in mood, upset by new situations/change
Anxious/Depressed	Dependent, feelings easily hurt, upset by separation, look unhappy, nervous, self-conscious, fearful, sad
Somatic Complaints	Complains of aches and pains, headaches, stomachaches, diarrhea, nausea, vomiting, not eating
Withdrawn	Acts immature, avoids eye contact, does not answer, little emotional expression or reaction, little interest
Sleep Problems	Difficulty sleeping alone, nightmares, resists going to bed, talks in sleep, wakes often, general loss of sleep
Externalizing Syndromes	
Aggressive Behavior	Difficulty concentrating, wanders, can't sit still, clumsy, shifts quickly
Attention Problems	Defiant, demanding, destructive, disobedient, no guilt, frustrated, fights, angry moods, stubborn, uncooperative, attention-seeking, can't wait
<b>DSM-IV Codes:</b> Examples of typical problems by diagnostic code.	
Affective Problems	Cries, sleep problems, looks unhappy, over or under eats, tired, low sleep, sad, little interest, underactive
Anxiety Problems	Dependent, difficulty sleeping alone, fearful, nervous, upset by separation, worries, panic, nightmares
Pervasive Developmental Problem	Upset by new things/change, avoid eye contact, does not answer, does not get along with others well, rocks head, little emotional expression or reaction, speech problem, strange behavior, withdrawn
Attention Deficit Hyperactivity Problem	Poor concentration, can't sit still, can't wait, demanding, gets into things, shifts quickly
Oppositional / Defiant Problem	Defiant, disobedient, angry moods, stubborn, hot-tempered, uncooperative