

MULTISYSTEMIC THERAPY

Maryland Quarterly Utilization, Fidelity, and Outcomes Report

Fiscal Year 2012 – Second Quarter
October, November, and December 2011



**Prepared by the Institute for Innovation and Implementation,
University of Maryland School of Social Work**

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MULTISYSTEMIC THERAPY

MARYLAND QUARTERLY UTILIZATION, FIDELITY, AND OUTCOMES REPORT

FY 2012 Second Quarter Highlights

How many youth received MST services?

A total of **168** youth and families¹ were served by MST during this report period, a decrease of only 4 youth compared with the last quarter. Overall, **79** youth were discharged from MST, **73 (92%) of whom had the opportunity for the full course of treatment.**

How well did therapists deliver MST?

The average adherence score in Maryland this quarter was **.68**. **All 6 therapist teams were at or above the target therapist adherence score of .61** (scores ranged from .61-.82). **Sixty-nine percent** of families had at least one TAM-R² interview, and **66%** of youth had a therapist with an average adherence score at or above the target score.

Did discharged youth complete MST?

Of the **79** youth who were discharged from MST:

- **56 (71%)** youth completed treatment;
- **9 (11%)** youth were discharged due to lack of engagement; and
- **8 (10%)** youth were placed for an event during MST treatment

What were the ultimate outcomes* for youth with an opportunity for the full course of MST treatment?

The ultimate outcomes for youth who had the opportunity for the full course of treatment (i.e., those who completed treatment, were discharged due to lack of engagement, or were placed) were:

- **62 (85%)** youth were living at home;
- **51 (70%)** youth were in school/working; and
- **56 (77%)** youth had no new arrests during MST Treatment.

**Please see Appendix 1 for definitions of outcome variables.*

MST focuses on changing individual, family, peer, school, and neighborhood factors that place youth at increased risk for delinquency.

¹ MST provides services for the entire family unit, but for the sake of brevity, the rest of this report will just reference “youth”.

² The percentage of families with a TAM-R is skewed due to families that start treatment at the end of the quarter. A TAM-R is not collected until a family has been in treatment for at least two weeks.

About Multisystemic Therapy (MST)

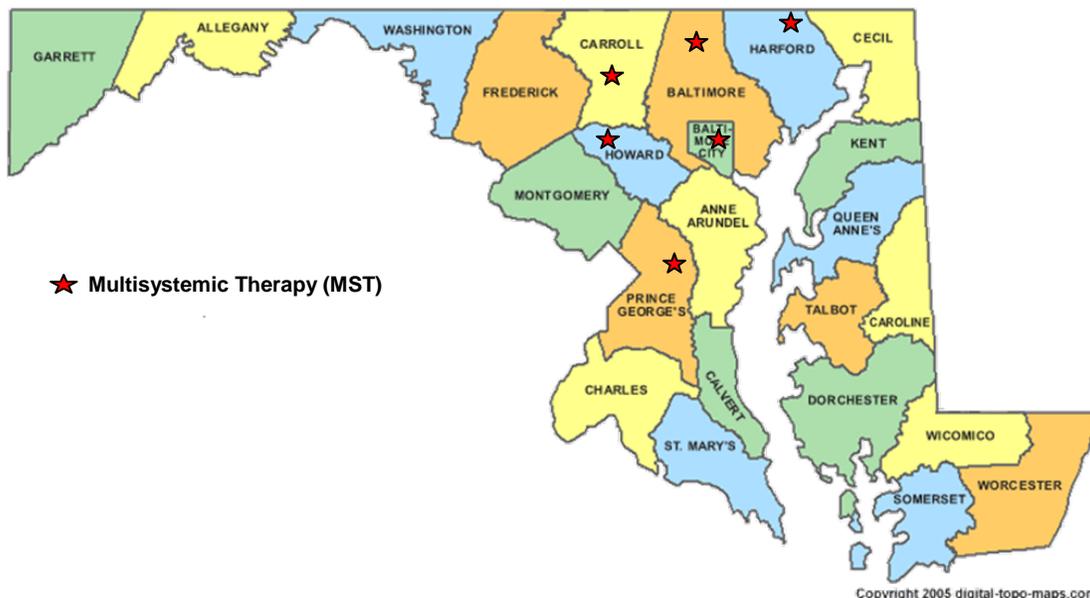
Multisystemic Therapy (MST) is an evidence-based practice (EBP) for families with youth ages 12 to 18 exhibiting a broad array of emotional and behavioral problems, including delinquency. MST focuses on changing the individual, family, peer, school, and neighborhood factors that place youth at increased risk for offending and re-offending, while also building protective factors. Great care is taken to ensure that providers are delivering MST according to the model. Fidelity (adherence) to the MST model is critical, as it is associated with positive outcomes for youth and families. Among the outcomes of particular interest in MST, there is evidence that delivering MST with high fidelity reduces the percentage of out-of-home placements, increases the percentage of youth in school or working, and reduces the percentage of youth with new arrests (e.g., Henggeler, Schoenwald, Bourduin, Rowland, & Cunningham, 1998).

Maryland MST Data

The following report summarizes utilization, fidelity, and discharge outcome data on youth who received MST during the second quarter of FY12. Data were collected from Maryland MST providers and the Multisystemic Therapy Institute (MSTI) database, and represents a snapshot of important information that is useful in describing and guiding the implementation of MST in Maryland. We work closely with providers to establish clear, consistent guidelines about the data collected, to ensure that reports accurately reflect the quality practices that providers deliver. The reported sample sizes (n) may vary throughout this document, depending on the extent of missing data for the particular variables being reported (e.g., County, funding source, etc.). **Please note that data used in this report are stored in a "live" database, which is constantly updated; the data presented in this report are current as of January 2012.**

Location of Maryland MST Providers

MST is provided throughout Maryland by three vendors: **Community Counseling & Mentoring Services, Inc. (CCMS)**, **Community Solutions, Inc. (CSI)**, and **North American Family Institute - MD (NAFI)**.

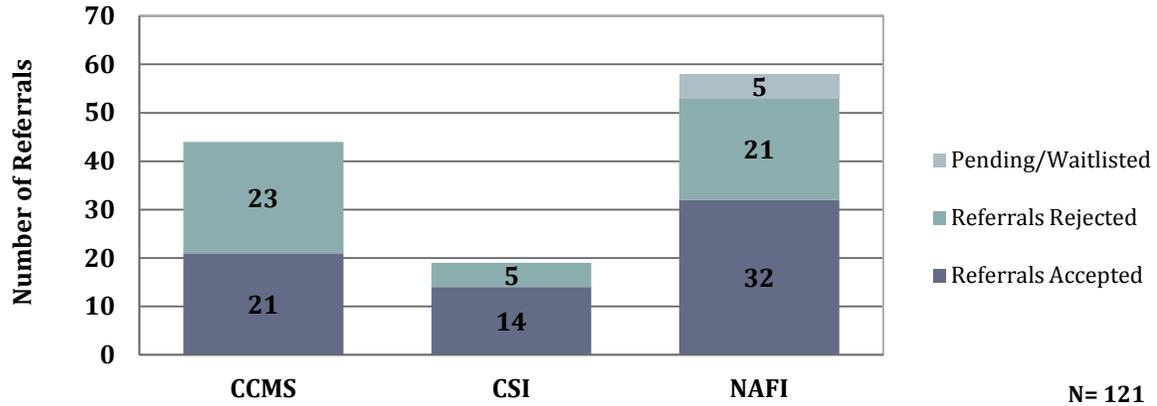


How was MST utilized in Maryland this quarter?

Who was referred to MST?

A total of **121** youth were referred to MST during the second quarter of FY12. Of the 121 youth who were referred, **49 (40%)** youth were not accepted.

Figure 1. Number of Referrals Accepted Compared to the Number of Referrals Not Accepted

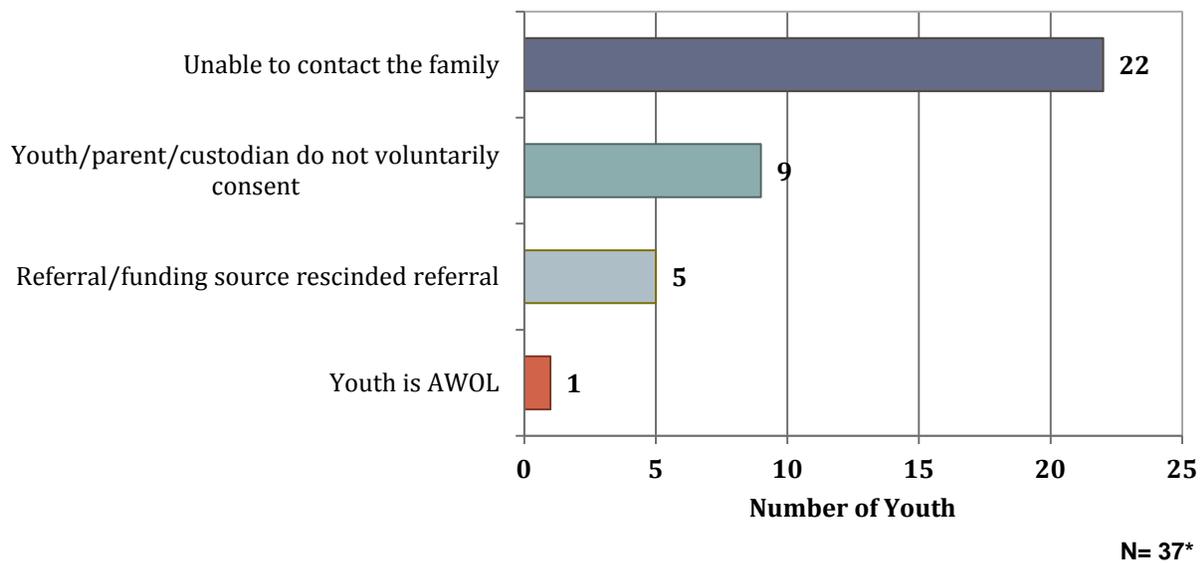


Note: The Baltimore County Core Service Agency is responsible for determining whether referrals to CSI are appropriate and does not accept inappropriate cases before they reach the provider.

What were the reasons that referrals were not accepted?

Of the 49 youth who were not accepted to MST, the most frequent reasons were “Eligible, but unable to contact the family” (**45%, n=22**), followed by “Eligible, but youth/parent/custodian do not voluntarily consent” (**18%, n=9**).

Figure 2. Reasons for Not Accepting a Referral



*indicates missing data

Who was served by MST?

Overall, **168** youth received MST services this quarter; of these, **78 (46%)** actually began services this quarter. The majority of youth served were African American/Black (**76%**) and male (**79%**). The average age was **16 years old** ($sd = 1.3$), and ages ranged from 12 to 17 years. Note that youth referred to MST had similar demographic characteristics as those served, with the exception of gender (male slightly lower) and African American/Black (slightly higher).

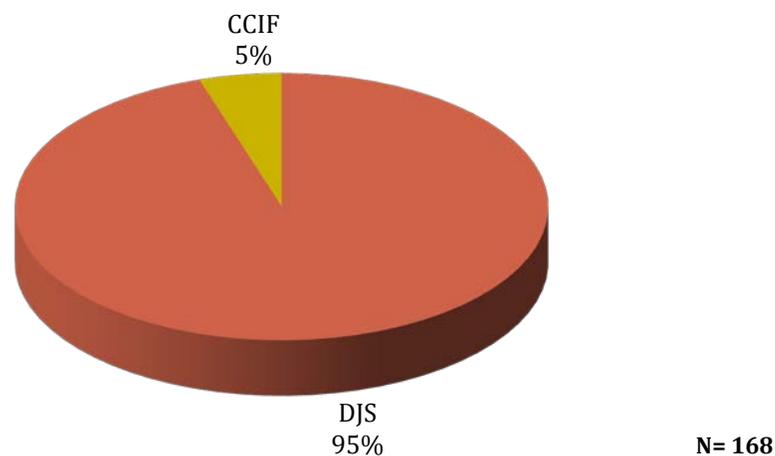
Figure 3. Demographic Characteristics of Youth Referred and Served by MST

		Youth Referred	Youth Served
Total Youth		121	168
Gender	Male	86 (71%)	132 (79%)
	Female	35 (29%)	36 (21%)
Race/ Ethnicity*	African American/ Black	99 (82%)	127 (76%)
	Caucasian/ White	18 (15%)	29 (17%)
	Hispanic/ Latino	4 (3%)	9 (5%)
	Other	--	3 (2%)
Age	Average (standard deviation)	16 (1.2)	16 (1.3)

How was MST funded?

Of the 168 youth served by MST during the second quarter of FY12, the majority were funded by DJS (**95%**).

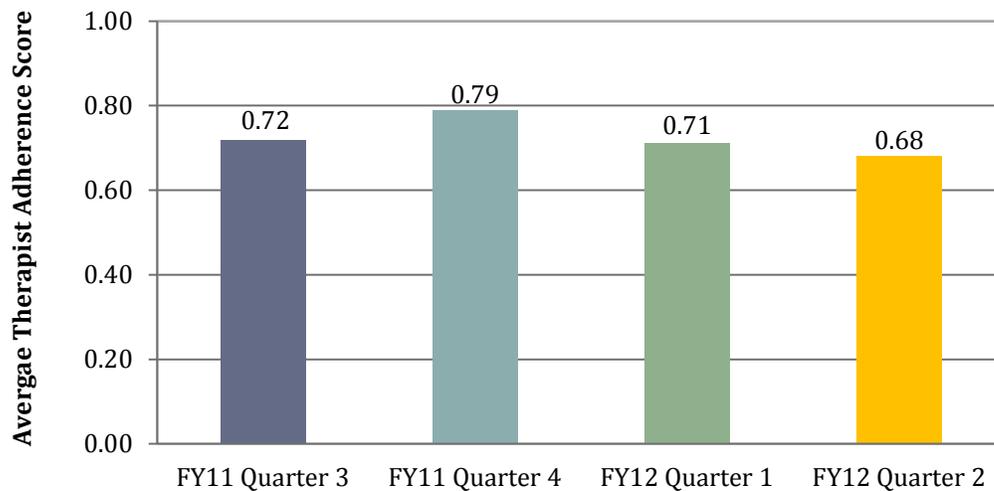
Figure 4. Funding Sources for Youth Served by MST



How well did providers adhere to the MST model?

Across Maryland, the average therapist adherence score remained above the target score of .61 during the second quarter of FY 2012 (note that a score of .61 is associated with good outcomes for families). **Two hundred and three** completed TAM-R forms were collected from **116** families during this quarter, with the average adherence equaling **.68**. This is a slight decrease from the adherence score reported in the previous quarter (.71). **Sixty-nine percent** of families served this quarter had at least one TAM-R³ interview, of whom **66%** had a therapist with an average adherence score at or above the target score.

Figure 5. MST Provider Fidelity Over the Last Four Quarters



How do youth look upon discharge from MST?

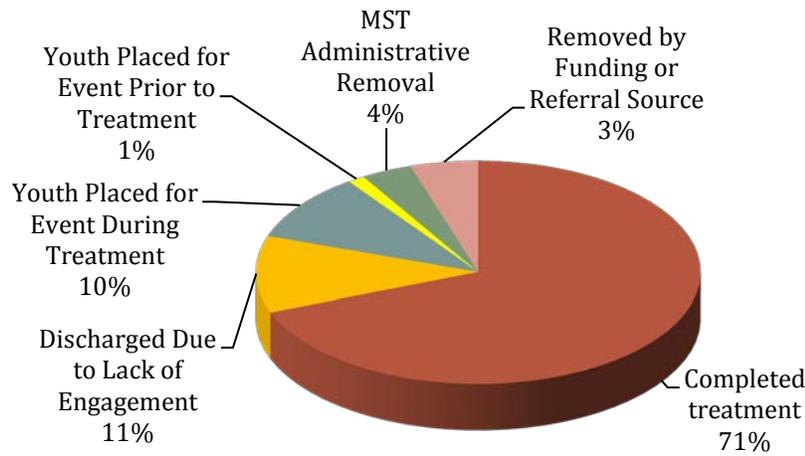
Upon discharge from MST, each case is evaluated in three areas: 1) did the youth and his/her family complete treatment, and if not, why (i.e., case progress); 2) were there sufficient changes associated with problem behaviors to suggest that changes will be maintained after discharge (i.e., instrumental outcomes); and 3) how was the youth doing in three primary areas of functioning—whether the youth is living at home, school status, and any new arrests (i.e., ultimate outcomes).

How many youth were discharged from MST and why were they discharged?

In the second quarter of FY12, **79** youth were discharged from MST, **73 (92%)** of whom had the opportunity for the full course of treatment (i.e., youth were discharged because they completed treatment, were not engaged, or were placed for an event during treatment). Among youth who discharged with the opportunity for the full course of treatment, a majority (**77%**) *completed* treatment – **71%** of all discharges. This is a significant increase from the previous quarter, during which **57%** of all discharged youth had completed treatment.

³ The percentage of families with a TAM-R is skewed due to families that start treatment at the end of the quarter. A TAM-R is not collected until a family has been in treatment for at least two weeks.

Figure 6. Discharges by Type



N= 79

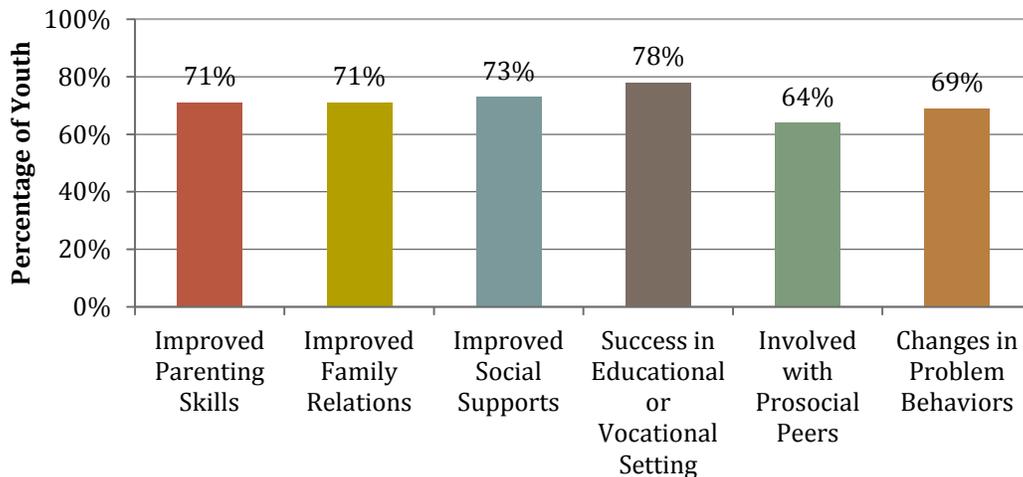
How long did it take to administer MST?

The average duration of MST treatment (i.e., the number of days between the date the youth started service and the date of discharge) was **114 days** (*sd*=39.7) for all youth who discharged with the opportunity for the full course of treatment, and **128 days** (*sd*=29.3) for youth who completed treatment.

Instrumental outcomes across the State

Instrumental outcomes include six items which identify whether or not a youth has achieved skills that are “instrumental” to positive outcomes during treatment. Therapists indicate “yes” or “no” for each item at program discharge to reflect changes that occurred during therapy. For each of the six instrumental outcomes, the majority of youth who had the opportunity for full course of treatment indicated improvement this quarter.

Figure 7. Instrumental Outcomes at Discharge for Youth who had the Opportunity for Full Course of Treatment



N=73

Ultimate outcomes across the State

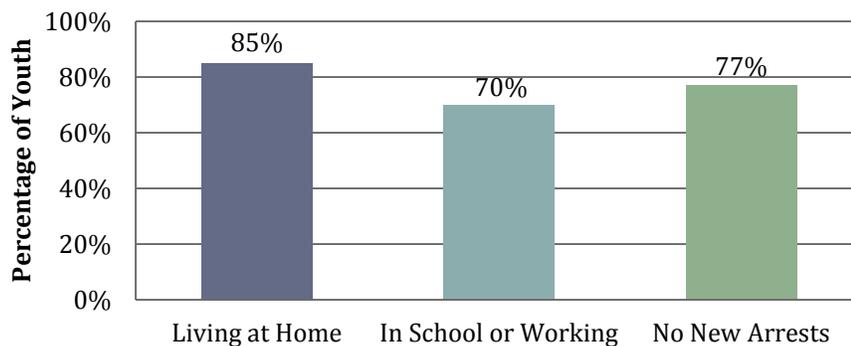
Ultimate outcomes provide basic, but critical, information about how the youth is functioning at discharge. The MST purveyor facilitates interpretation of the ultimate outcomes by providing cut-off points to categorize ultimate outcomes at discharge. These categories are labeled **Zone 1** “within target”, **Zone 2** “needs monitoring,” and **Zone 3** “area of concern.”

Ultimate Outcomes Rating Criteria

Ultimate Outcomes	Target	Zone 1	Zone 2	Zone 3
Percent of youth living at home	90%	>88%	80-87.9%	<80%
Percent of youth in school/working	90%	>85%	75-84.9%	<75%
Percent of youth with no new arrests	90%	>85%	75-84.9%	<75%

Two of the outcomes reported this quarter—Living at Home and No New Arrests—need monitoring, while the third ultimate outcome, In School or Working, is an “area of concern.”

Figure 8. Ultimate Outcomes at Discharge for Youth who had the Opportunity for Full Course of Treatment



N=73

What is the story behind the numbers?

With assistance from providers and other key stakeholders, The Institute has identified areas of particular strength and areas that require additional attention in order to improve MST services for youth and families in Maryland. The following are areas of strengths, areas in need of attention, strategies implemented this quarter and/or those suggested moving forward, and recommendations for other stakeholders to pursue.

STRENGTHS:

1. The percentage of youth completing treatment increased significantly from 57% to 77% this quarter. Although Maryland is still below national targets for completion (85%), providers have made substantial efforts to close the gap this quarter.
2. Although slightly lower this quarter, adherence to the model across providers (.68) remains above the national target.
3. Most youth are remaining at home and in the community at discharge from MST (85%). In addition, the percentage of youth with no new arrests during treatment has remained high this quarter (77%).

ISSUES/DRIVERS: Areas needing attention

1. Many of the youth referred to MST are eligible for the program but do not start the service. Of the 121 youth referred in this quarter, 49 (40%) did not start services – similar to the previous quarter (41%). The largest percentages of youth who do not start services were categorized as not being able to contact the family and or the parent refused to consent.
2. Providers also need to strive to reduce the percentage of youth who discharge due to lack of engagement (11%), with the goal being less than 5% of discharges.
3. Data for this quarter show that only 69% of youth served had at least one TAM-R collected, which is below the target of 100%.
4. The percentage of youth in school or working (70%) is significantly lower than the national MST target (85%).
5. MST youth in a variety of areas across the state continue to be referred to outpatient drug treatment programs (i.e., Drug Court). Outpatient drug treatment programs are not recommended simultaneous to MST, particularly if youth are attending group sessions with other anti-social/delinquent peers. *(Information gleaned from recent Program Implementation Reviews (PIRs) completed by MST experts for each MST team in Maryland).*

STRATEGIES: Actions implemented (or planned) to address the issues

The MST Services Consultants will focus attention on the following strategies to address areas needing attention:

1. Place high emphasis on engaging families at the time of referral, including working with referral sources to establish new ways to connect MST providers with families during the referral process.
2. Increase successful completion rates by:
 - a. Identifying reasons why families are not engaged in treatment.
 - b. Continuing to provide ongoing professional development for therapists on MST youth/family engagement practices.
 - c. Continuing to work with referral sources – particularly DJS – to identify youth at risk of placement during treatment and advocate for program continuation (instead of placement) as indicated.
3. Identify and implement strategies to increase TAM-R completion/collection.
 - A. Therapists should provide an overview to parents on how TAM-R scores are used, how they will be contacted, and when to anticipate being contacted during the admission process.
 - B. Therapists should collaborate with families regarding goals accomplished weekly and link these to TAM-R adherence questions.
 - C. Therapists and supervisors can review TAM-R reports and incorporate growth areas into development plans.
 - D. Therapists should continue to collect paper TAMs when phone contacts are not successful.
 - E. Supervisors can assist or take over TAM collection as they usually have relationships with the family and are an independent reporter of therapist adherence.
4. Develop interventions plans that match the family's parenting skills to obtain success and buy-in to the interventions that will assist the family in reaching their overarching goals (increase ultimate outcomes).
 - a. Assist the family brainstorming about the strengths and weaknesses of the proposed intervention plan.
 - b. Use the analytic process to anticipate barriers and develop interventions should these barriers arise.
 - c. Identify supports to assist in effectively implementing plans.

Recommended additional support and involvement from stakeholders

Referral sources can assist by:

1. Working with MST therapists to establish effective engagement practices at time of referral to ensure families are willing to participate.
2. Working collaboratively with providers and other community resources to find alternatives when providers are at capacity.

Other stakeholders can assist by:

3. Giving MST providers the opportunity to provide substance abuse treatment in addition to addressing other at-risk behaviors in the home, in place of making outside referrals to outpatient drug treatment.
4. Allowing MST Supervisors to meet with judicial stakeholders and offer education regarding the usefulness of MST's approach to substance abuse. The evidence supports MST as a treatment option, as many of the drivers to substance use are similar to other delinquent behaviors.

Appendix 1 – MST Item Definitions

Discharge Data Elements:

- Completed treatment: This item indicates that the youth and family completed treatment (therapist and family mutually agreed to end treatment). Family progress on goals is evaluated with the other discharge sections.
- Lack of engagement: The youth and family did not have a full course of treatment due to inability to get agreement from the family to do MST (e.g., repeated missed appointments).
- Placement: The youth engaged in behavior during treatment that resulted in a placement that prevented further MST involvement.
- Placement, prior event: Behavior resulting in placement occurred prior to MST involvement with the family.
- MST Program administrative removal/withdrawal: Decision based on MST Program policies and guidelines (e.g., youth did not meet eligibility criteria).
- Funding/referral source administrative removal/withdrawal: Decision based on funding/referral source policies (e.g., youth incorrectly referred due to errors at referral agency, funding limited to a set period of time).
- Moved out of service area: Youth not eligible for services due to move outside service area.

Therapist Adherence

The *Therapist Adherence Measure – Revised (TAM-R)* evaluates the therapist’s adherence to the MST model as reported by the primary caregiver. The adherence score will range from 0 to 1, with a score of 1 representing the highest level of adherence. **The threshold score is .61.** This threshold has empirically been shown to be predictive of outcomes. Families with an average adherence score above the threshold, in general, are more likely to have positive outcomes than those where the score is below the threshold. The TAM-R data demonstrates model fidelity at three levels:

- Number of TAM-R interviews completed for each youth
- Overall adherence scores for each therapist (from completed TAM-R interviews)
- Number of youth who are being served by therapists who are providing services at or above proficiency (threshold).

Ultimate Outcomes

These items provide basic information about how the youth is functioning *at the time of discharge*.

- Youth is living at home: Home is defined as a private residence that is approved by the youth’s guardian. This could include a parent’s home, the home of an approved relative or friend of the family, or in their own apartment. Foster homes or other types of placement would not be included in the definition of “home.”
- Youth is attending school: Youth is attending frequently enough to meet expectations placed on youth by school system or court. If the discharge occurs during the summer when school is not in session, it is recommended that the response, “yes,” be selected if the youth was attending school at the end of the last school year, or is working.
- Youth has not been arrested: Arrested means charged for a new criminal behavior (i.e., not a violation of probation).