

MST: Doing “Whatever it Takes” for Troubled Young People

This report focuses on young people referred for MST[®], from January 1 until December 31, 2019, who had an opportunity for a full course of treatment (e.g., cases were clinically closed *). The results included in this report are based on a comprehensive review of 13,866 (83.8%) of 16,544 cases referred to MST, MST-SA, and MST-PSB, which have similar performance expectations.

At Home	92%
In School/Working	87%
No Arrests	89%

Adolescents referred to these services typically present with multiple problems (aggression, truancy, substance use) and are frequently at risk of out of home placement. Some of the cases served by MST-PSB teams also exhibit problem sexual behavior. Discharge outcomes continue to demonstrate the effectiveness of MST. Overall, when young people are discharged, they are living at home (or an approved home-like setting), engaging in productive activity at school or a job, and have had no arrests during treatment.

*Cases not included either received no services (4.8%), were closed for administrative reasons (7.6%) or were not able to provide outcome data due to international data sharing limits (3.9%).

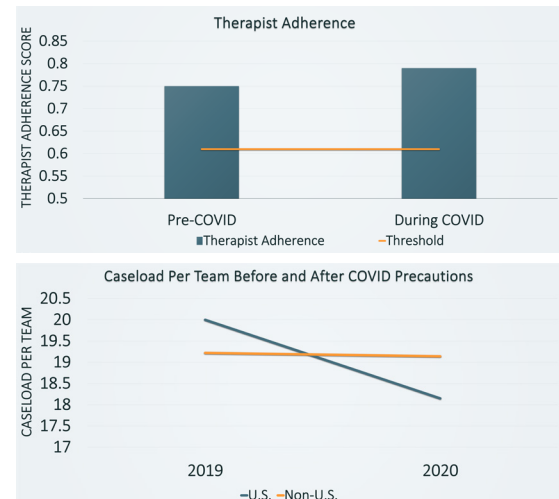
COVID Impacts on MST Treatment Process

Between March and April of 2020, MST teams were faced with making changes in their home-based work with families to address risks related to the COVID pandemic. The MST Institute conducted a survey of MST supervisors, to which 266 of 625 (42.5%) responded; and examined administrative data to identify specifically how the use of telehealth may have affected the delivery of MST services. The results of the analysis showed that, while COVID has added challenges, MST teams worldwide have met those challenges, and therapists continued to demonstrate adherence in sessions and remain available to families.

Therapist Adherence and Open Cases per Team before and during COVID Precautions

Therapist adherence data collected from April 1, 2020 to June 30, 2020 were compared to data collected during the previous three months from the same therapist-caregiver dyads. Caregiver reports of therapist adherence were significantly higher during the COVID period than during the previous time period with average scores of .75 and .79, respectively ($t(2,841) = -10.31, p < .001$.)

A second performance indicator, total number of cases open per team, was determined for two time periods, April to July, 2019 and April to July, 2020. A total of 459 active teams had cases during both time periods, and a change in number of cases score was calculated. The number of cases served by teams was significantly lower during the period when COVID precautions were being used ($t(458) = 3.91, p < .001$) and the drop in cases was significantly greater in the U.S. than in other countries implementing MST ($F(1,458)=7.65, p = .006$). Teams in the U.S. had, on average, 1.8 fewer cases and teams outside the U.S. had .08 fewer cases post COVID precautions.



Supervisor Perceptions of the Impact of Telehealth on Treatment Process

Analysis of supervisor survey data indicated that the use of telehealth did not appear to negatively impact therapist availability, or contacts to the majority of families. In fact, only 1.5% of supervisors reported therapists were less available, and more than half of the supervisors reported that families received the same amount or more contact. This finding is consistent with a time analysis study, conducted by our Norwegian partners (Taraldsen, personal communication) that showed treatment teams found ways to deliver treatment at the same intensity as before precautions were implemented. Fifty-nine supervisors (22%), however, reported that frequency of contacts was negatively affected by more family no shows and cancellations, and this outcome was significantly related to the proportion of telehealth sessions. If telehealth was used for 10% or less of sessions there was no impact; but, if used for more than half, frequency of no shows or cancellations increased.

Overall, telehealth was reported to make the implementation of MST more challenging with the exception of crisis on-call, where only 5% of supervisors indicated more crisis calls during the use of telehealth. The majority of supervisors reported that efforts to engage families and informal/formal support networks in treatment were less effective and that it was harder to implement interventions to facilitate change and help caregivers to meet their social support needs.

When discharge data on cases opened during COVID precautions is available, future evaluation will be able to focus on the impact of changes in treatment process on client outcomes. While therapists continue to be adherent, the challenges around engaging families and intervening in the multiple systems surrounding the family will continue as long as precautions are necessary.

MST Team Performance Dashboard

Demographically, young people receiving MST were identified as White (32.1%), Black (23.9%), Hispanic (22.9%) or Other (7.5%); with 10.1% declining to answer the question on race/ethnicity. Their average age was 15.1 years, and the majority were male (67.2%). Of these cases, 4,289 (30.9%) were served by teams outside the U.S. and 9,577 (69.1%) received MST within the U.S. Thirteen different languages were identified as the caregiver's primary language, with English spoken by 73.8% of caregivers, Spanish by 15.8% of caregivers, and 10.4% of caregivers spoke one of the other eleven languages identified.

The following table displays the average results of 406 MST, MST-SA, and MST-PSB teams on the MST performance measures and demonstrates the effectiveness of MST teams worldwide.

Item	Performance Indicator	Target	Worldwide Average	Team Range (SD) ^a
ULTIMATE OUTCOMES REVIEW				
1	Percent of youth living at home	90%	91.6%	70-100 (7.2)
2	Percent of youth in school and/or working	90%	86.1%	55.5-100 (10.2)
3	Percent of youth with no new arrests	90%	89.2%	62.5-100 (8.9)
THERAPIST ADHERENCE DATA				
4	Overall average adherence score ^b	0.61	0.75	0.36-1.00 (0.13)
5	Percent of clients reporting adherence above threshold (>0.61) ^b	80%	75.1%	21.4-100 (18.1)
6	Percent of youth with at least one TAM-R interview	100%	91.2%	65.7-100(8.5)
CASE COLSURE DATA				
7	Percent of youth completing treatment	85%	89.1%	63.3-100 (8.6)
8	Percent of youth closed due to lack of engagement	<5%	4.2%	0-18.9 (4.9)
9	Percent of youth placed during treatment	<10%	6.7%	0-25.9 (6.4)
10	Average length of treatment in days	100-140	130.2	89.3-179.1 (16.3)
^a Key indicators were calculated by team. The Project Range represents scores within 3 standard deviations of the mean on these indicators achieved by teams with more than 15 cases.				
^b Therapist adherence data were available on 12,700 youth.				

MST and Its Adaptations

For the sample of youth that were closed for clinical reasons, a total of 14,452 young people received MST or one of its adaptations. MST adaptations provide treatment modified to target specific needs in some special populations or communities. See <https://info.mstservices.com/mst-adaptations> for more information about MST adaptations.

	MST	MST-PSB	MST-SA	MST-FIT	MST-CAN	MST-BSF	MST-PSYCH
Number of youth (%)	12,272 (84.9%)	893 (6.2%)	701 (4.8%)	143 (1.0%)	287 (2.0%)	82 (0.6%)	74 (0.5%)

Note. MST-PSB (MST-Problem Sexual Behavior); MST-FIT (MST-Family Integrated Transitions); MST-CAN (MST for Child Abuse and Neglect); MST-BSF (Building Stronger Families); MST-PSYCH (MST-Psychiatric)