

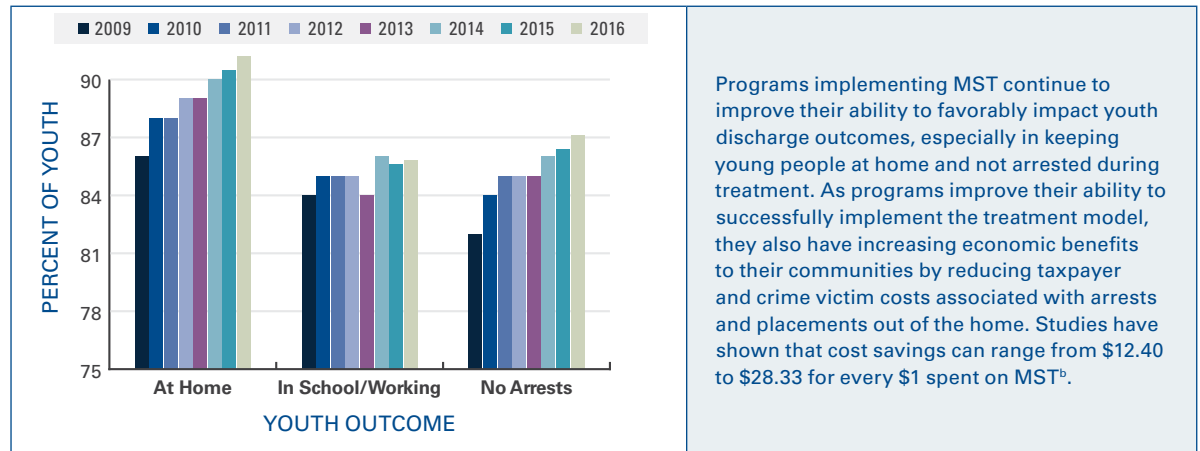
## MST Helps Troubled Adolescents and Their Families

This report focuses on young people referred to standard MST<sup>®</sup>, from January 1 until December 31, 2016, who had an opportunity for a full course of treatment (e.g., cases were clinically closed). Adolescents referred to MST typically present multiple problems (aggression, truancy, substance use) and are frequently at risk of out-of-home placement. The following results are based on a comprehensive review of 12,578<sup>a</sup> (85.4%) of 14,733 cases referred during 2016. Demographically, these young people were identified as White (34.7%), Black (26.3%), Hispanic (23.3%) or Other (15.7%). Their average age was 15.1 years, and the majority were male (66.2%). Of these cases, 33.8% (4,249) were served by international teams and 66.2% (8,329) received MST within the U.S. Thirteen different languages were identified as the caregivers' primary language with English spoken by 74.3% of caregivers, Spanish by 16.1% of caregivers and 9.6% of caregivers spoke one of the other eleven languages identified.

At Home	<b>91%</b>	At the close of treatment, the vast majority of the young people receiving MST were living at home, going to school or working, and had no arrests during treatment. The measure "in school/working" is defined as engaged in productive activity in a community setting. The percentage of young people who were not enrolled in any educational setting or working was only 4%, while 10% were in other settings (e.g., correction/treatment facilities or alternative programs that exclusively target disruptive young people).
In School/ Working	<b>86%</b>	
No Arrests	<b>87%</b>	

<sup>a</sup>Cases not included either received no services (3.6%), were closed for administrative reasons (7.2%) or were not able to provide outcome data due to international data sharing limits (3.8 %).

### Progress in Discharge Outcomes Continues!

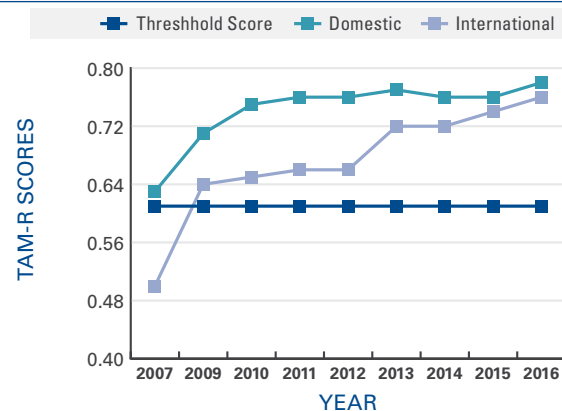


Programs implementing MST continue to improve their ability to favorably impact youth discharge outcomes, especially in keeping young people at home and not arrested during treatment. As programs improve their ability to successfully implement the treatment model, they also have increasing economic benefits to their communities by reducing taxpayer and crime victim costs associated with arrests and placements out of the home. Studies have shown that cost savings can range from \$12.40 to \$28.33 for every \$1 spent on MST<sup>b</sup>.

<sup>b</sup><http://mstservices.com/proven-results/cost-effectiveness>

### MST Implemented Successfully in 16 Countries

The Therapist Adherence Measure (TAM-R) has been demonstrated to predict youth outcomes as long as two years post discharge. For example, the number of youth criminal charges was 36% lower for families with the highest quartile TAM-R score than for families with the lowest quartile TAM-R score<sup>c</sup>. The TAM-R score ranges from 0 – 1 and, while the goal is to achieve the highest score, a score of .61 indicates adequate adherence to the treatment model. Results show that, during the past decade, international programs have become as successful as U.S. teams in implementing MST with fidelity, despite the diverse cultures and countries represented.



<sup>c</sup>Schoenwald, S.K. (2008). Toward evidence-based treatments: MST as an example. *Journal of Child and Adolescent Substance Abuse*, 17 (3), 69-91.

## MST Performance Dashboard

In addition to the ultimate outcomes and adherence scores noted above, results from other standard MST performance measures demonstrate the effectiveness of MST teams worldwide. MST Performance Dashboard target scores, based on results from numerous clinical studies, set a standard that MST programs aim to meet despite implementation in a variety of settings that may differ from the controlled settings of the clinical studies. In 2016, on average, standard MST programs met or exceeded the targets for all measures except the percent of youth in school and/or working, percent of youth with no new arrests, and the percent of youth with at least one TAM-R interview.

Item	Performance Indicator	Target	Overall Average <sup>a</sup>	Project Range (SD) <sup>b</sup>
<b>ULTIMATE OUTCOMES REVIEW</b>				
1	<b>Percent of youth living at home</b>	90%	91.2%	68.4%–100% (6.9)
2	<b>Percent of youth in school and/or working</b>	90%	85.8%	55.3%–100% (10.0)
3	<b>Percent of youth with no new arrests</b>	90%	87.1%	57.7%–100% (9.5)
<b>THERAPIST ADHERENCE DATA</b>				
4	<b>Overall average adherence score<sup>c</sup></b>	0.61	.77	.44–.99 (.11)
5	<b>Percent of clients reporting adherence above threshold (&gt; 0.61)<sup>c</sup></b>	80%	77.4%	28.6%–100% (6.1)
6	<b>Percent of youth with at least one TAM-R interview</b>	100%	91.9%	66.7%–100% (6.8)
<b>CASE CLOSURE DATA</b>				
7	<b>Percent of youth completing treatment</b>	85%	87.8%	64.0%–100% (8.2)
8	<b>Percent of youth closed due to lack of engagement</b>	<5%	4.9%	0.0%–21.0% (4.7)
9	<b>Percent of youth placed during treatment</b>	<10%	7.3%	0.0%–26.9% (6.8)
10	<b>Average length of treatment in days</b>	100-140	126.8	87.1–169.4 (13.3)

<sup>a</sup> Excluded from this report were 2,255 cases that were referred to MST adaptation programs in 2016.

<sup>b</sup> 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.

<sup>c</sup> Therapist adherence data were available on 11,564 youth.

## MST and Its Adaptations

During 2016, a total of 14,833 young people received MST or one of its adaptations and were closed for clinical reasons. MST adaptations provide treatment modified to target specific needs in some special populations or communities. See [mstservices.com/mstadaptations.pdf](http://mstservices.com/mstadaptations.pdf) for more information about MST adaptations.

Number of Clinically Closed Cases that Were Served by MST and its Adaptations in 2016

	MST	MST-PSB	MST-SA	MST-FIT	MST-CAN	MST-BSF	MST-PSYCH
Number of youth (%)	12,578 (84.8%)	919 (6.2%)	849 (5.7%)	231 (1.6%)	175 (1.2%)	58 (0.4%)	23 (0.2%)

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