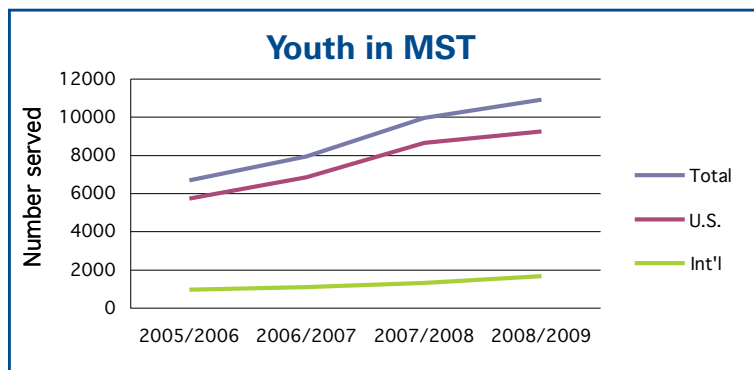


MST Helps Troubled Youth

This report focuses on 20,869 youth enrolled in standard MST from March 2007 until March 2009, who had an opportunity for a full course of treatment*. Results from this set of families are compared to those collected before March 2007 and reported in the 2008 MST Data Report to assess progress over time.

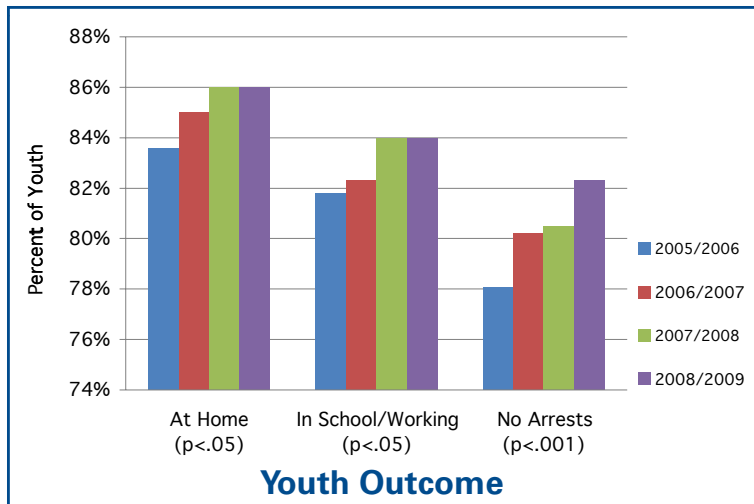
| | | |
|--------------------------|------------|---|
| At Home | 86% | *These results are based on the comprehensive review of the 20,869 cases (87 percent of 24,053 cases referred for standard MST treatment) that were closed for clinical reasons (i.e., completed treatment, low engagement, or placed). |
| In School/Working | 84% | |
| No Arrests | 82% | |

Increasing numbers of teenagers had access to MST, an evidence-based practice for troubled youth. Controlling for differences in website usage in 2006 and 2009, data indicate a growth rate of 24 percent in the U.S. and 54 percent internationally.



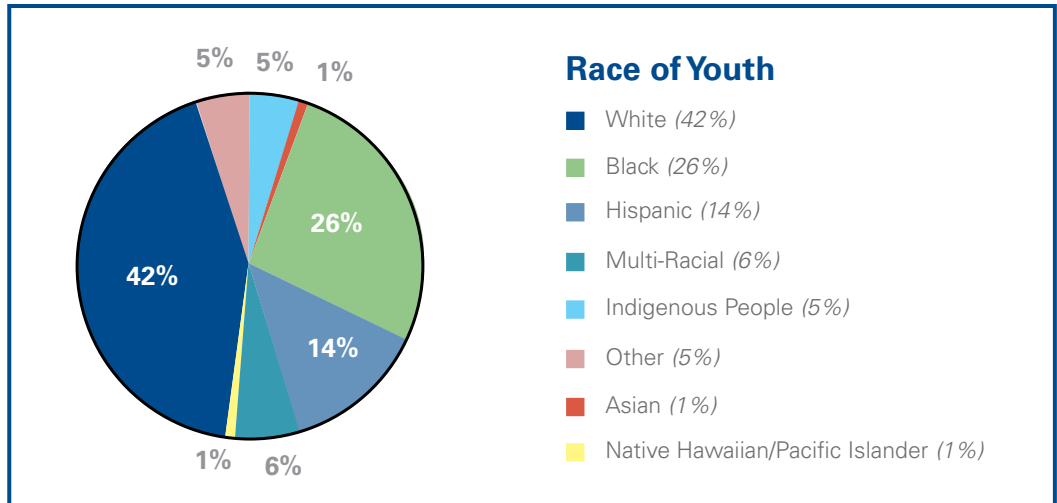
Only 2.6 percent of 24,053 families referred failed to have the first visit with a therapist.

While serving increasing numbers of youth, the MST training and support services were helping teams make gains in caregivers' ratings of therapists' adherent implementation of MST (average adherence score of .70) and improve outcomes.



Description of Youth Served

The majority of youth was male (65.6%) and spoke English as their primary language (87%). The average age was 15.11 years. The young people served were from a diverse group of races and cultures.

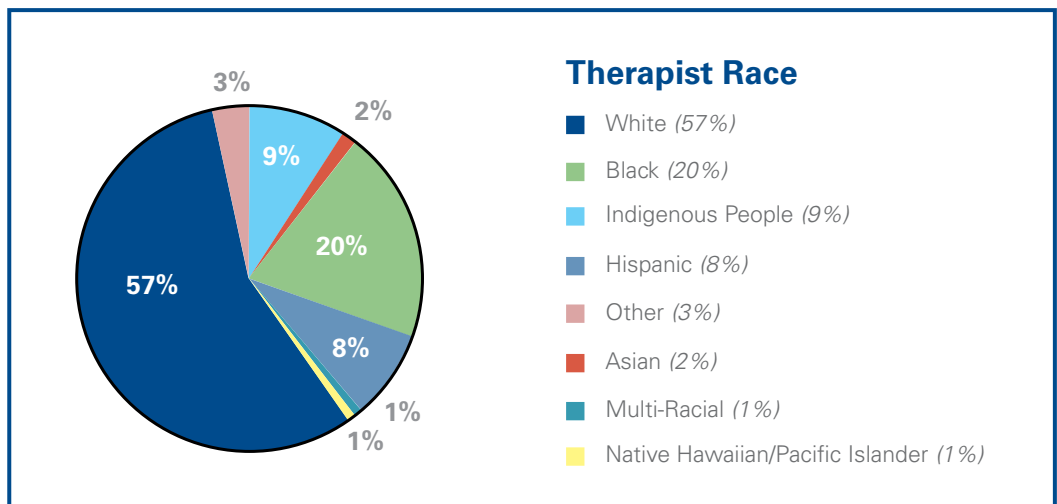


Given the very different policies governing the service systems in the U.S. and other countries, the systems that refer the most youth to MST are different.

- Referral sources in the U.S. included Juvenile Justice (53%), Social Services (20%), Education (2%), Mental Health (8%), and Other (17%).
- International teams received most of their referrals from Social Services (58%), Juvenile Justice (18%), Education (3%), Mental Health (9%), and Other (12%).

Description of Therapists

MST teams employed a total of 5,398 therapists. Data on gender was available for 4,329 therapists and 3,896 therapists reported their race or ethnicity. Therapists were predominantly female (79%), and just over half were white (57%). The breakdown by race is as follows.



Further analysis of the relationship of these demographic variables to outcomes will be explored in future reports.

MST Performance Dashboard

The data from the 20,869 cases that closed for clinical reasons* were used to assess performance of standard MST programs worldwide** on the following set of key performance indicators, known as the MST Performance Dashboard. Of these cases, 14 percent (2,970) were served by international teams and 86 percent (17,899) received MST within the U.S. Findings are reported separately below.

| Item | Performance Indicator | Target | Overall Averages | U.S. Averages | Int'l Averages |
|---------------------------------|---|---------|------------------|---------------|----------------|
| ULTIMATE OUTCOMES REVIEW | | | | | |
| 1**** | Percent of youth living at home | 90% | 86.2% | 85.8% | 88.6% |
| 2*** | Percent of youth in school and/or working | 90% | 83.9% | 85.2% | 75.9% |
| 3 | Percent of youth with no new arrests | 90% | 81.5% | 81.7% | 80.2% |
| THERAPIST ADHERENCE DATA | | | | | |
| 4*** | Overall average adherence score**** | 0.61 | .70 | .71 | .64 |
| 5*** | Percent of clients reporting adherence above threshold (> 0.61)**** | 80% | 68.3% | 69.9% | 58.8% |
| 6 | Percent of youth with at least one TAM-R interview | 100% | 85.8% | 85.8% | 85.8% |
| CASE CLOSURE DATA | | | | | |
| 7 | Percent of youth completing treatment | 85% | 81.9% | 81.6% | 83.8% |
| 8*** | Percent of youth closed due to lack of engagement | <5% | 7.3% | 7.0% | 8.8% |
| 9*** | Percent of youth placed during treatment | <10% | 10.8% | 11.3% | 7.3% |
| 10**** | Average length of treatment | 100-140 | 131.65 | 129.50 | 144.51 |

*Remaining cases were closed for administrative reasons (e.g., placed for an event that occurred prior to MST, referral cancelled due to youth not being discharged from facility as planned, or moving away).

**Families served by MST adaptation teams or Norwegian teams were not included. Norway data were not included due to strict Norwegian laws that have prevented the Norway teams' use of the MSTI Enhanced Website.

***There are significant differences between U.S. and international averages on these items ($p < .001$).

****Adherence data were available on 17,899 (85.8%) of the overall population served. Of those, 15,351 (85.8%) were from U.S. teams and 2,548 (14.2%) were from international teams.

Primary differences between U.S. and international teams are seen in outcomes, therapist adherence and length of treatment. In the U.S., youth who did not complete treatment were more likely to be placed out of their homes, while in other countries, youth were more likely to discontinue treatment due to lack of engagement. We know from juvenile delinquency research that, in the U.S., locales vary in their rate of arrest and out-of-home placement. These differences are not accounted for in this report. There were no differences in the percent of youth completing treatment or in youth getting in trouble with the law during treatment.

Important Areas of Improvement

Comparisons to the 2008 MST Data Report show that teams are implementing MST with increased fidelity and clinical skill.

Discharge outcomes have improved with more youth living at home (increase from 84 to 86 percent), staying in school or working (increase from 82 to 84 percent), and having fewer arrests during treatment (increase from 79 to 82 percent).

- Teams have greatly improved their efforts to collect therapist adherence data from the primary caregivers. Overall, teams have at least one adherence interview from 86% of families.
- The average therapist adherence score is above the target for both domestic and international teams. This represents a significant improvement for the international teams where the percent of clients reporting adherence above threshold went from 36% in 2008 to 59% in this report. Domestic teams showed a similar increase from 59% to 70%.
- The percent of families completing treatment (e.g., closed by mutual agreement between therapist, family, and key stakeholders) increased from 79% to 82%.

Contributors to Improvement

There were a number of major innovations in program implementation and training that have supported the efforts to grow with fidelity. Some of the significant innovations that may have impacted the delivery of services between 2007 and 2009 include:

- Standardized Supervisor Orientation trainings and supervisor electronic access to key materials
- Standardized Program Developer training and improved resources for the Program Development Method
- Standardized MST Expert Orientation trainings, quarterly inservice training, and MST Expert electronic access to training resources
- Standardized hiring resources including a Therapist Recruitment Toolkit and a Supervisor Recruitment Toolkit
- Enhanced MSTI resources to include new online TAM-R reports and regular MST Expert consultation reviews

While it is impossible to determine whether, in fact, these innovations had a direct influence on the family outcomes, it seems likely that they contributed in some way to increased adherence to the treatment model and to the ability of MST to continue to be disseminated more widely without losing quality. As has already been established in the clinical trials of MST, increased adherence leads to better outcomes.