Multisystemic Therapy in Pennsylvania

Three Years of Data, Fiscal Years 2012–2014

This report is a compilation of data documenting the usage of and outcomes achieved by Multisystemic Therapy (MST) providers in Pennsylvania. MST is a well-known evidence-based program, with proven outcomes, and this report begins with “Treatment Outcomes at Discharge,” followed by additional data around implementation quality, referral sources, and more.

Multisystemic Therapy takes place in the youth’s home, school, and community, where it focuses on changing aspects of the youth’s environment (e.g., community, neighborhood, school, peers, family, and individual) that contribute to or maintain identified problem behaviors. Therapists use research-proven interventions whenever possible, such as cognitive-behavioral, behavioral, behavioral parent training, and strategic and structural family therapy approaches, and there is an emphasis on empowering caregivers and developing their skills to effectively manage the youth. Consultation to and collaboration with other systems such as school, juvenile probation, child welfare, and employers are also integral parts of the model.

Target Population
- Adolescents age 12–17 with significant externalizing behaviors
- Youth with chronic or severe antisocial behaviors, including youth with histories of violence, felonious offenses, or out-of-home placement
- Must have a caregiver available to participate in treatment

Frequency of Sessions
- As often as needed, often multiple times per week

Average Length of Treatment
- Three to five months

Targeted Outcomes
- Fewer out-of-home placements
- Reduced criminal recidivism and incarceration
- Improved family functioning & peer relationships
- Decreases in behavior problems and substance use

Treatment Outcomes at Discharge

Treatment outcomes are reported for all clinically discharged youth (i.e., youth with the opportunity to complete treatment, not discharged for administrative reasons). For school-related concerns, the sample only includes youth presenting with concerns in those areas at enrollment.

The sample of youth with drug screens indicating substance use was 10% or fewer of youth discharged each year and is therefore not reported here. However, in FY 13/14 therapists were asked to report whether youth substance use had increased, decreased, or remained the same, based on clinical judgment and available information.

Of youth who had substance use concerns at intake, 75% had reduced or eliminated use at discharge. An additional outcome, “Met Treatment Goals,” was also available in FY 13/14. Based on therapist reports, 78% of youth met most or all of their treatment goals.

Pennsylvania Multisystemic Therapy Providers
- Adelphoi Village
- Beacon Light
- Child Guidance Resource Center
- Community Solutions, Inc.
- Cray Youth & Family Services
- Family Services of NW PA
- Harborcreek Youth Services
- Hempfield Behavioral Health
- Home Nursing Agency
- K/S-MST
- Lourdesmont
- MHY Family Services
- Pennsylvania Counseling Services

There are currently 40 MST teams serving 54 counties in Pennsylvania. Four of these teams offer MST for Problem Sexual Behavior (MST-PSB) in addition to traditional MST. A fifth MST-PSB team, operated by Wordsworth in Philadelphia, serves MST-PSB youth exclusively and is therefore not included in this report.

For more information or to find a provider near you, visit www.episcenter.psu.edu/emaps

Numbers in this report may vary slightly from data in other outcome reports on the EPISCenter website, based on when data was pulled from INSPIRE.
Implementation Quality

MST has a sophisticated system of quality assurance that includes weekly supervision and consultation, regular assessment of therapist and supervisor adherence to the clinical model, and semi-annual program reviews jointly conducted by the MST Supervisor and an external MST Expert. Model drift is promptly addressed via therapist development plans and program improvement plans.

Therapist Adherence: During the past three years, 71% of families reported satisfactory therapist adherence to the MST model. In FY 13/14, average therapist adherence scores ranged from .53 to .90 across teams, with an average of .72. Of 39 teams, 37 (95%) met or exceeded target adherence levels set by the MST model (i.e., adherence score >= .61).

Program Implementation: MST identifies 18 required implementation practices which are monitored through semi-annual reviews of each team. Reflective of MST’s attentiveness to implementation quality, MST teams in Pennsylvania met an average of 93 – 95% of the required practices each year. When a team did not meet all 18 requirements, it was typically due to difficulty in just one or two areas. In all three years, 16 of the 18 required practices were met by 90% or more of the teams. The two requirements with which the most teams had difficulty are both largely influenced by the system in which an MST team operates:

- Low caseloads. The percent of teams with low caseloads (fewer than four youth per therapist) was consistently around 26 – 29% over the three-year period.
- Youth being referred to programs not compatible with MST. This often involved court-ordered participation in day treatment or drug and alcohol counseling groups. The percent of teams experiencing this issue decreased from 47% in FY 11/12 to 31% in FY 13/14, suggesting a possible decrease in stacking of services over the past three years.

Treatment Completion Rates

Clinical discharges include youth who had the opportunity to complete MST, whether or not they did so, while “administrative discharges” were removed from the program for reasons unrelated to their clinical progress. Over a three-year period, 629 youth (13.5%) were administratively discharged while 4,026 youth (86.5%) were clinically discharged from MST.

Completion rates reflect the percent of youth whose cases were closed based upon mutual agreement of the therapist and caregivers. In FY 13/14, slightly more than half of the teams (56%) met the target completion rate of 85% set by the MST model. Completion rates for clinically discharged youth ranged from 60% to 100% across teams with a median of 86%.

Over the past three years, a total of 3,345 youth completed MST, representing 83% of clinically discharged youth.
Referral Sources Over Time

Statewide, the majority of youth enrolled in MST are referred by the juvenile justice and child welfare systems.

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<tbody>
<tr>
<td>Juvenile Justice</td>
<td>46%</td>
<td>43%</td>
<td>37%</td>
</tr>
<tr>
<td>Child Welfare</td>
<td>38%</td>
<td>37%</td>
<td>41%</td>
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<tr>
<td>Mental Health</td>
<td>9%</td>
<td>13%</td>
<td>13%</td>
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<tr>
<td>Education</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>4%</td>
<td>6%</td>
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Due to rounding, numbers may not total 100%.

**Primary referral sources** vary considerably across providers and communities. For example, in FY 13/14:

- The percent of enrolled youth referred by the **juvenile justice system** ranged from 0 to 79% across providers.
- The percent of youth referred by the **child welfare system** ranged from 7% to 74%.
- The percent of youth referred by the **mental health system** ranged from 0 to 87%.

**Population Served:** 76% of the youth served were either at **immediate risk** of or stepping down from out-of-home placement.

**Presenting Issues**

Statewide, verbal aggression and threats, defiance or rule-breaking, physical aggression, and family conflict were the most common presenting problems for youth enrolled in MST.

These data is only available for youth enrolled in FY 13/14.
Youth Served

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<tbody>
<tr>
<td>Number of MST Teams Operating</td>
<td>50</td>
<td>49</td>
<td>46</td>
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<tr>
<td>Number of MST Teams Reporting</td>
<td>47</td>
<td>46</td>
<td>43</td>
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<tr>
<td>Total Youth Served (new + previously enrolled cases)</td>
<td>2,197</td>
<td>2,048</td>
<td>1,834</td>
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Youth Enrolled

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<tbody>
<tr>
<td>New Youth Enrolled</td>
<td>1,614</td>
<td>1,533</td>
<td>1,352</td>
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<tr>
<td>Percent of Youth Enrolled who were at Imminent Risk of Being Placed Out of Home or Stepping Down from Placement</td>
<td>79%</td>
<td>77%</td>
<td>71%</td>
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From FY 11/12 to 13/14, the number of youth enrolled annually decreased by 16%. Additionally, the number of MST teams in Pennsylvania decreased from 50 at the beginning of FY 11/12 to 40 teams at the end of FY 13/14. In many cases, providers consolidated existing teams, so that counties continued to have access to MST.

Changes in utilization of MST over the past three years varied across providers. Nine of 12 providers saw a decrease in the number of youth served over the past three years, although in some cases these same providers saw increased utilization of certain teams within their MST programs. Two providers increased the number of youth served while one provider remained stable (less than 5% change).

Length of Treatment

Length of treatment has remained stable over the past three years. On average, youth take 4.6 months to complete MST treatment. This is consistent with the model's short-term approach and target of treatment completion in three to five months. Non-completers received an average of 2.9 months of MST. Across teams, length of treatment for clinical discharges in FY 13/14 ranged from 99 to 164 days, with a median of 129 days. Most teams (89%) were within model targets for length of treatment.

Data Sources

EPISCenter is tasked with collecting data on program utilization, implementation quality, and outcomes for a menu of evidence-based prevention and intervention programs across the Commonwealth. Data in this report are from INSPIRE (INtegrated System for Program Implementation and Real-time Evaluation), a web-based data collection and reporting system collaboratively developed by the EPISCeter and the Penn State Department of Engineering, with funding from the Pennsylvania Commission on Crime and Delinquency. INSPIRE allows providers to easily collect, store, analyze, and report data, and facilitates increased consistency in data-reporting across providers.

Data housed in INSPIRE come from two sources. Providers enter data directly into the INSPIRE system using a web-based interface, and data from the MST Enhanced Website (the international MST system) are downloaded into INSPIRE each month. This report is based on data collected from July 1, 2011 through June 30, 2014. Frequently Asked Questions about INSPIRE can be found at www.episcenter.psu.edu/inspire/faq.

INSPIRE is a web-based data collection system used by MST teams across Pennsylvania.

Connecting Research, Policy, and Real-world Practice

The EPISCeter represents a collaborative partnership between the Pennsylvania Commission on Crime and Delinquency (PCCD) and the Bennett Pierce Prevention Research Center, College of Health and Human Development, Penn State University. The EPISCeter is funded by PCCD and the Department of Public Welfare. This resource was developed by the EPISCeter through PCCD grant VP-ST-24368.