Multisystemic Therapy (MST) Overview

Presented by
MST Services
Common elements of MST treatment models include the following:

- Theory of change
- Nine guiding treatment principles
- Clinical decision making, problem-solving process (analytic process)
MST Foundation (continued)

- Use of research-based treatment techniques
- Standard service delivery structure
- MSTI data system for decision support
- Standard Quality Assurance processes and ongoing training/support for providers
What is “MST”? 

- Community-based, family-driven treatment for antisocial/delinquent behavior in youth
- Focus is on “Empowering” caregivers (parents) to solve current and future problems
- The MST “client” is the entire ecology of the youth - family, peers, school, and neighborhood
MST Research and Dissemination

The Medical University of South Carolina, MST Services and the MST Institute

Licensed and affiliated organizations:
- MST Network Partner Organizations
- Local MST Provider Organizations
MST Presence Around the World

- Canada
- Iceland
- Scotland
- Norway
- Sweden
- Denmark
- The Netherlands
- Belgium
- U.S.A
- England
- Switzerland
- N. Ireland
- Australia
- Chile
- New Zealand

Multisystemic Therapy (MST) Overview
How Does MST Work?

Key Points:

• Theoretical and Research Underpinnings
• Assumptions and MST Theory of Change
• Core Treatment Components
Theoretical Underpinnings

Based on social ecological theory of Uri Bronfenbrenner

- Children and adolescents live in a social ecology of interconnected systems that impact their behaviors in direct and indirect ways
- These influences act in both directions (they are reciprocal and bi-directional)
Social Ecological Model

- Community
- Provider Agency
- School
- Neighborhood
- Peers
- Extended Family
- Caregiver
  - CHILD
  - Siblings
- Family Members

MST
Multisystemic Therapy
MST Assumptions

- Children’s behavior is strongly influenced by their families, friends, and communities (and vice versa)
- Families and communities are central and essential partners and collaborators in MST treatment
- Caregivers/parents want the best for their children and want them to grow to become productive adults
- Families can live successfully without formal, mandated services
- Professional treatment providers should be accountable for achieving outcomes
- Science/research provides valuable guidance

And… Change can occur quickly
MST Theory of Change

Multisystemic Therapy (MST) Overview
MST Treatment Principles

- Nine principles of MST intervention design and implementation
- Treatment fidelity and adherence is measured with relation to these nine principles
Principles of MST (Cont.)

1. Finding the Fit:
The primary purpose of assessment is to understand the “fit” between the identified problems and their broader systemic context.

2. Positive & Strength Focused

Therapeutic contacts should emphasize the positive and should use systemic strengths as levers for change.
3. Increasing Responsibility

Interventions should be designed to promote responsibility and decrease irresponsible behavior among family members.

4. Present-focused, Action-oriented & Well-defined

Interventions should be present-focused and action-oriented, targeting specific and well-defined problems.
Principles of MST (Cont.)

5. Targeting Sequences
   Interventions should target sequences of behavior within and between multiple systems that maintain identified problems.

6. Developmentally Appropriate
   Interventions should be developmentally appropriate and fit the developmental needs of the youth.
7. Continuous Effort
Interventions should be designed to require daily or weekly effort by family members.

8. Evaluation and Accountability
Intervention efficacy is evaluated continuously from multiple perspectives, with providers assuming accountability for overcoming barriers to successful outcomes.
9. Generalization

Interventions should be designed to promote treatment generalization and long-term maintenance of therapeutic change by empowering care givers to address family members’ needs across multiple systemic contexts.
**Environment of Alignment and Engagement of Family and Key Participants**

**MST Conceptualization of “Fit”**

**Desired Outcomes of Family and Other Key Participants**

**MST Analytical Process**

1. **Referral Behavior**
2. **Measuring**
   - Intervention Implementation
3. **Intermediary Goals**
4. **Prioritize**
5. **Do**
6. **Re-evaluate**
   - Assessment of Advances & Barriers to Intervention Effectiveness

**Overarching Goals**

**Desired Outcomes of Family and Other Key Participants**

**Environment of Alignment and Engagement of Family and Key Participants**

**MST Conceptualization of “Fit”**
Intervention strategies: MST draws from research-based treatment techniques

- Behavior therapy
- Parent management training
- Cognitive behavior therapy
- Pragmatic family therapies
  - Structural Family Therapy
  - Strategic Family Therapy
- Pharmacological interventions (e.g., for ADHD)
Service Delivery Structure

• The team is on call 24/7 and conducts evening and weekend visits whenever needed
• Services delivered in home or community
• Contacts occur 2-4 times per week on average but frequency is determined by clinical need and decreases in the final stage of treatment
MST’s Research Heritage

Key Points:

• 40+ years of Science
• Consistent Outcomes
• Role of Model Adherence
40+ Years of Science

74 Published Outcome, Benchmarking, and Implementation Studies

Including 26 randomized trials and 51 independent evaluations (yielding > 140 peer-reviewed journal articles)

- 16 with serious juvenile offenders
  - 7 independent studies

- 18 with adolescents with serious conduct problems
  - 15 independent studies
Consistent Outcomes

In Comparison with Control Groups, MST:
- Led to higher consumer satisfaction
- Decreased long-term rates of re-arrest 25% to 70%
- 47% to 64% decreases in long-term rates of days in out-of-home placements
- Improved family relations and functioning
- Increased mainstream school attendance and performance
- Decreased adolescent psychiatric symptoms
- Decreased adolescent substance use

But, none of this happens without adherence to MST
20+ Year / Long-Term Outcomes

- Fewer Arrests: 36%
- Fewer Violent Arrests: 75%
- Fewer Days in Adult Confinement: 33%
- Fewer Issues with Family Instability (divorce, paternity, child support suits): 38%
- Fewer Financial Problems (credit, contact, rent, suits): 3%

22 year post treatment

(n= 148, 84% tracking success)
• Required training and support activities (orientation training, boosters, weekly expert consultation, and weekly supervision)
• MST Institute hosted web-based decision support system
• Research supported adherence measures
• Bi-annual review of MST implementation with program leadership using feedback from the above with goals established for improvement
MST Fidelity Measures

Research-based adherence measures:

- TAM - youth criminal charges 36% lower for families with maximum adherence score (1) than for families with minimum adherence score (0)
- SAM - youth criminal charges 53% lower for families with maximum SAMSP score (1) than for families with minimum SAMSP score (0)
- CAM - consultant/MST expert adherence predicts improved therapist adherence and improved youth outcomes
MST Transportability Study: Relationship between TAM-R and Youth Criminal Outcomes (2.3 year follow-up)

TAM-R Predicting Post-Treatment Criminal Charges

Youth criminal charges 36% lower!
Implementation Support

Goal of MST Implementation:
• Obtain positive outcomes for MST youth and their families

Standard Implementation supports:
• Program development/start up (e.g., site visit, hiring)
• Organizational manual and support as needed
• Ongoing training and support from an MST Expert
• Ongoing implementation monitoring (measure adherence and outcomes, and work sample reviews)
Additional Optional Resources

- Yearly supervisor workshops
- Conferences
- Evaluation support from MST Institute (MSTI)
MST- SUBSTANCE ABUSE (MST-SA)
What is MST-SA?

- Adaptation developed to give providers expertise in contingency management (CM) interventions which are proven effective in the treatment of substance abuse

- MST-SA adaptation is intended for programs that serve a high percentage of substance-abusing youth
Contingency Management (CM) is a substance abuse treatment approach based in behavioral and cognitive-behavioral therapy that includes:

- Tailored assessments of use/non-use conducted with the youth and caregivers
- Family Drug-Management Planning, including Drug-Refusal Skills Training
- Point and Level Reward System
- Drug Testing Protocol used primarily by caregivers
- Strong focus on engagement and sustainability
ACS - MST/MST-SA Target Population (ages 12-18 years)

Inclusionary Criteria
- Youth with delinquent/challenging behaviors, including substance abuse
- Families with a high level of conflict

Exclusionary Criteria
- Youth living independently
- Sex offending in the absence of other anti social behavior
- Youth with moderate to severe autism (difficulties with social communication, social interaction, and repetitive behaviors)
- Actively homicidal, suicidal or psychotic
- Youth whose psychiatric problems are primary reason leading to referral, or have severe and serious psychiatric problems
Substance Abuse
Results in MST

Randomized Trial with Substance Abusing / Dependent Offenders (N=118); MST vs. Community Treatment

Henggeler, Pickrel, & Brondino, 1999
Research Conclusions

- Integrating CM with MST has enhanced the effectiveness of MST in treating youth substance abuse.
- Training in contingency management interventions has been successfully incorporated into all MST programs.
MST-SA Staffing and Structure within ACS

- Supervisor full-time, masters degree
- Teams of 3-4 therapists, masters degree
- Caseload of 4 - 6 cases
- The use of a full-time case-aide position may be approved by MST Services on a case-by-case basis.
- Treatment length 3 - 5 months
Training Requirements

Supervisors and Therapists
• 5-day MST orientation training
• Quarterly on-site booster training

Supervisors
• Supervisor orientation

All of the above offered regularly in NYC
MST- PREVENTION (MST-P)
What is MST-Prevention?

- MST-SA modified to specifically meet the needs of a child welfare preventive services system like ACS
- Objectives for making changes
  - Target the same families referred to MST-SA
  - Address areas of low alignment between MST-SA and the child welfare system
  - Implement additional practices and evaluate the impact of the changes to further improve outcomes within ACS Preventive Services
Implementation Challenges

The following issues were identified as differences in context between implementing standard MST in child welfare vs juvenile justice:

- Requirements related to all youth in the home vs just the target youth
- Focus on child safety and well-being as opposed to priority on community safety for juvenile justice
- High level of monitoring against ACS standards to ensure all safety issues are met which results in longer length of treatment
Target child 10 - 18 years old

Young people involved with child welfare that are at risk of child abuse or neglect due to delinquent/incorrigible behaviors or challenges parenting an adolescent

Young people with substance use problems

Families with high family conflict
Toward A More Specific Treatment for CW Prevention Services

Building on all treatment components of MST/MST-SA, MST-P added the following:

- Increased focus on use of motivation enhancement techniques and skill building with caregivers to:
  - Increase interpersonal effectiveness and impulse control
  - Decrease emotional dysregulation
  - Increase positive affect in the family

- Higher sense of urgency regarding child safety concerns driven by weekly and long-term goals

- Standardized assessment of child well-being
• Pilot project conducted with MST-SA ACS Teen Prevention Project teams using data collected at the MST Institute between 11/1/2013 and 1/31/16.
• Single team implementing adaptation compared to other teams on the MST key outcomes
Key MST Outcomes

No families were closed due to lack of engagement in MST-Prevention
Measure of Child Well-Being

**Total Difficulties Score**

- Pre: 16
- Post: 12

**Prosocial Score**

- Pre: 6
- Post: 8
# Family Support Caseworker Outcomes

<table>
<thead>
<tr>
<th>Instrumental Outcomes:</th>
<th>Number of Cases with Needs Identified</th>
<th>% Yes</th>
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<tbody>
<tr>
<td><strong>For Families with Identified Need, the Percent of Families Demonstrating Improvement at Discharge:</strong></td>
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<tr>
<td>1. Access to resources for basic needs (including food, clothing, furniture)</td>
<td>23</td>
<td>100%</td>
</tr>
<tr>
<td>2. Skills to pursue employment opportunities</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td>3. Skills or resources to maintain benefits through public assistance as needed</td>
<td>23</td>
<td>100%</td>
</tr>
<tr>
<td>4. Resources for adult education, ESL, or vocational programs</td>
<td>3</td>
<td>67%</td>
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<tr>
<td>5. Access to referrals, programs, or resource for pro-social activities for all minor children</td>
<td>46</td>
<td>87%</td>
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<tr>
<td>6. Support to ensure supervision to all minor children</td>
<td>30</td>
<td>70%</td>
</tr>
<tr>
<td>7. Skills and resources to ensure appropriate educational programs for all minor children</td>
<td>29</td>
<td>93%</td>
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## Ultimate Case Work Outcomes

<table>
<thead>
<tr>
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<th>Number of Cases=52</th>
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<tr>
<td>1. Family is financially stable meeting all basic needs for children</td>
<td>98%</td>
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<tr>
<td>2. Family’s health and mental health needs are met</td>
<td>90%</td>
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<tr>
<td>3. Family housing is stabilized without risk of homelessness</td>
<td>98%</td>
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<tr>
<td>4. No safety factor present</td>
<td>90%</td>
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Summary of Findings from Initial Research

- Outcomes for MST-Prevention were comparable to MST-SA and included additional outcomes related to child welfare, e.g., child well-being and casework outcomes.

- Casework outcomes improved during treatment for most families:
  - Instrumental (e.g., increase family access to resources for basic needs, public assistance, and educational programs) and
  - Ultimate (e.g., family financial stability, health, housing, and safety)
MST-Prevention
Staffing and Structure for ACS

- Supervisor full-time, masters degree
- Teams of 3-4 therapists, masters degree
- *Family support caseworker, bachelor degree*
- Caseload of 4 - 6 cases
- Treatment length 4 - 9 months
### Casework Activity Differences

**MST/MST-SA**
- Per model standards, there is no one on the team to assist families with their casework needs
- In NYC, some providers have staff at the agency to assist with casework, not standardized

**MST-PREV**
- Family Support Caseworker position is fully integrated on team and accountable to MST-PREV supervisor
- Standard assessment protocol including SDQ, safety, and psychosocial needs and outcomes
Training requirements are the same as MST-SA with the following additions:

- 2 day MST-Prevention Orientation for all treatment staff
- MST-Prevention Supervisor Orientation
Thank you for your time and attention!

www.mstservices.com       www.mstinstitute.org

Questions?
Contact Melanie.Duncan@mstservices.com