

MST
Multisystemic Therapy

Multisystemic Therapy (MST) Overview

Scott W. Henggeler, Ph.D.
Family Services Research Center
Medical University of South Carolina

Family Services Research Center
Medical University of South Carolina

MST
Multisystemic Therapy



Charleston
where history lives

MST
Multisystemic Therapy

MST Research and Dissemination

Family Services Research Center (FSRC) at the
Medical University of South Carolina (MUSC)

MST Services
MST Institute

Licensed and affiliated organizations:
MST Network Partner Organizations
Local MST Provider Organizations

Where is MST Being Used?



- Over 30 states in the U.S. and in 10 countries
- Statewide infrastructure in Connecticut, Georgia, Hawaii, New Mexico, Ohio and South Carolina
- Nationwide program in Norway (25+ teams)
- Other international replications: Australia, Canada, Denmark, Ireland, England, Sweden, Switzerland, the Netherlands, and New Zealand.

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
- MST “client” is the entire ecology of the youth - family, peers, school, neighborhood
- Highly structured clinical supervision and quality assurance processes


Families as the Solution




- MST focuses on families as the solution
- Families are full collaborators in treatment planning and delivery with a focus on family members as the long-term change agents
- Giving up on families, or labeling them as “resistant” or “unmotivated” is not an option
- MST has a strong track record of client engagement, retention, and satisfaction

MST “Champions” & Advocates 

- U.S. Surgeon General: Reports on Mental Health and Youth Violence
- National Institutes on Health (NIH)
- U.S. Department of Justice - OJJDP
- National Institute on Drug Abuse (NIDA), Center for Substance Abuse Treatment (CSAT) Center for Substance Abuse Prevention (CSAP)
- Washington State Institute for Public Policy (WSIPP)
- “Blueprints for Violence Prevention”

How Does MST Work? 

- MST Assumptions
- MST Theoretical Assumptions
- How is MST Implemented?

MST Assumptions 

- Children’s behavior is strongly influenced by their families, friends and communities (and vice versa)
- Families are key to success
- 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
- Change can occur quickly
- Professional treatment providers should be accountable for achieving outcomes
- Science/research provides valuable guidance

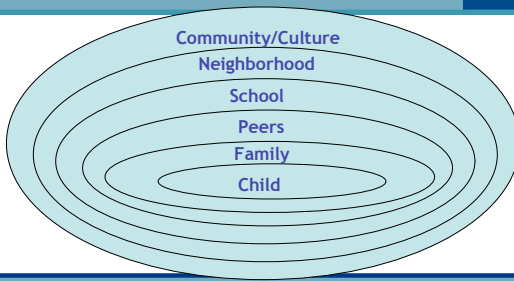
MST Theoretical Assumptions



Based on Bronfenbrenner, Haley and Minuchin

- 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)

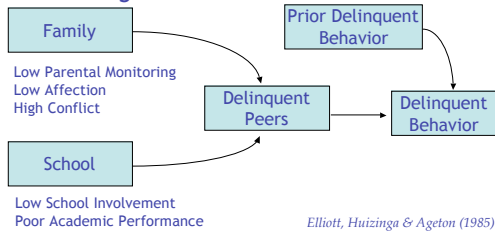
Ecological Model



Causal Models of Delinquency and Drug Use



Condensed Longitudinal Model



Delinquency is a Complex Behavior



- Common findings of 50+ years of research: delinquency and drug use are determined by multiple risk factors:
 - Family (low monitoring, high conflict, etc.)
 - Peer group (law-breaking peers, etc.)
 - School (dropout, low achievement, etc.)
 - Community (↓ supports, ↑ transiency, etc.)
 - Individual (low verbal and social skills, etc.)

Implications for Effective Intervention



The research on delinquency and drug use suggests that, to be most effective, services should be:

- Comprehensive and have the capacity to address all of the relevant risk factors present for each youth and family
- Individualized to the strengths and needs of each youth and family
- Delivered in the naturally occurring systems and be implemented in “ecologically valid” ways

How Does MST “Work?”



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)

How Does MST “Work?” (continued)



MST context for the use of these evidence-based intervention strategies

- MST program philosophy emphasizes that service providers are accountable for outcomes
- Program structure removes barriers to service access
- Families and communities are central and essential partners in MST “treatment”
- Caregivers/parents are key to long-term success

How is MST Implemented?



- Single therapist working intensively with 4 to 6 families at a time
- “Team” of 2 to 4 therapists plus a supervisor
- 24 hr/ 7 day/ week team availability
- 3 to 5 months is the typical treatment time (4 months on average across cases)
- Work is done in the community: home, school, neighborhood, etc.

How is MST Implemented? (continued)



- MST staff deliver all treatment - typically no services are brokered/referred outside the MST team
- Never-ending focus on engagement and alignment with the primary caregiver and other key stakeholder (e.g. probation, child welfare, etc.)
- MST staff must be able to have a “lead” role in clinical decision making for each case
- Highly structured weekly clinical supervision and Quality Assurance (QA) processes

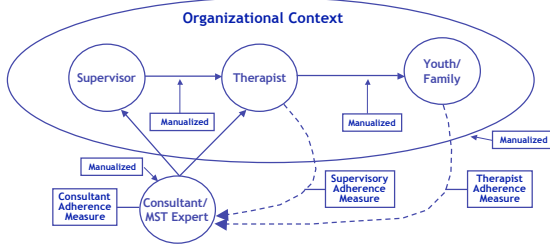
MST Quality Assurance System



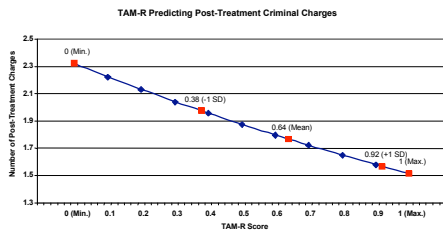
Elements of the MST Quality Assurance system:

- Research-validated adherence technologies
- Development planning for all professionals
- Structured training (orientation and booster)
- On-the-job training (on-going, weekly expert case review and consultation)
- Weekly clinical supervision

MST Quality Assurance System



MST Transportability Study: Relationship between TAM-R and Youth Criminal Outcomes (2.3 year follow-up)



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



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.

Principles of MST (continued)



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 (continued) **MST**
Multisystemic Therapy

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.

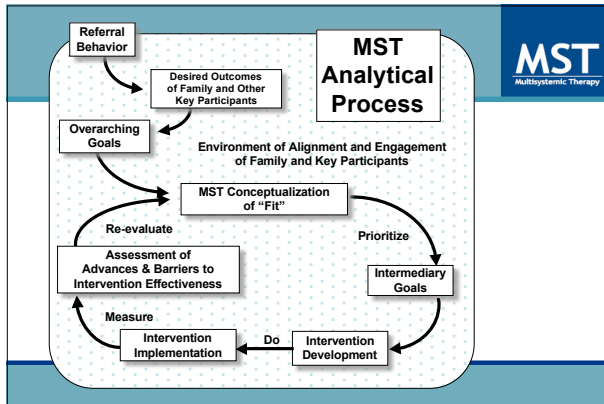
Principles of MST (continued) **MST**
Multisystemic Therapy

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.

Principles of MST (continued) **MST**
Multisystemic Therapy

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.



MST's Research Heritage

- 25+ years of Science
- Consistent Outcomes
- Current Research Trials and
- Adaptation Pilots

MST: 25+ Years of Science

14 Randomized Trials and 2 Quasi-Experimental Trials Published (>1400 families participating)

- 7 with serious juvenile offenders
 - 2 independent randomized trials by Ogden and Timmons-Mitchell
- 2 with substance abusing or dependent juvenile offenders
- 2 with juvenile sexual offenders
- 3 with youths presenting serious emotional disturbance
- 1 with maltreating families
- 1 with adolescents with poorly controlled diabetes (independent: Ellis)

Other randomized trials are in progress

Consistent Outcomes **MST**
Multisystemic Therapy

In Comparison with Control Groups, MST:

- Higher consumer satisfaction
- Decreased long-term rates of rearrest 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
- Decreased adolescent psychiatric symptoms
- Decreased adolescent substance use

But, none of this happens without adherence to MST

Long-term Outcomes **MST**
Multisystemic Therapy

- Long-term follow-up to the Missouri Delinquency Project: 14-year post-treatment outcomes

Individuals who had been involved in MST as a youth (average age at follow-up = 28.2 years):

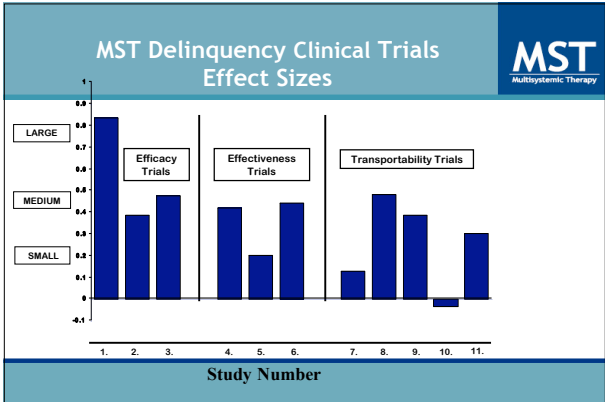
- ✓ 54% fewer arrests
- ✓ 64% fewer drug-related arrests
- ✓ 57% fewer days in adult confinement
- ✓ 43% fewer days on adult probation

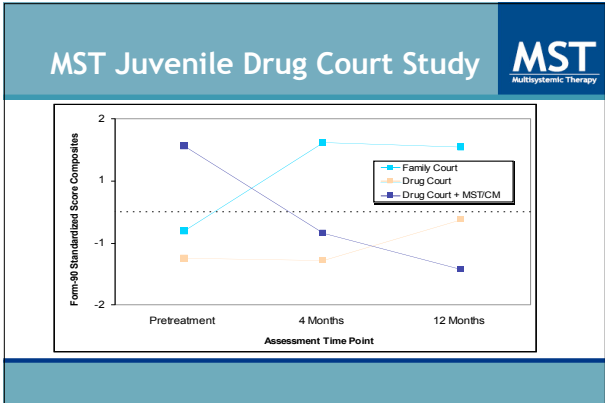
Adult Days Confined **MST**
Multisystemic Therapy

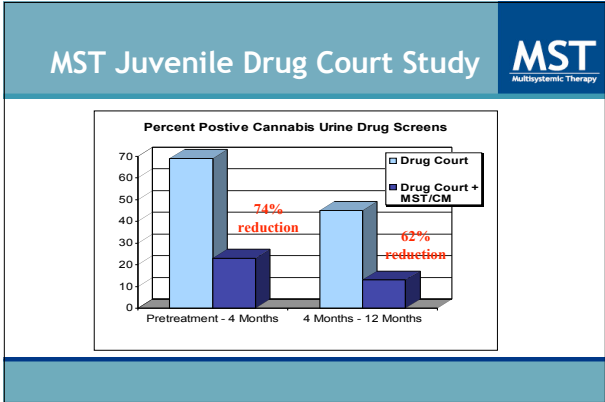
- 14-Year Follow Up

Treatment	Days Confined	Years Confined
MST	582 days	1.59 years
Individual Therapy	1357 days	3.72 years

57% reduction







MST Effectiveness Study with Adolescent Sex Offenders



- ◆ A Chicago-based study that began in September 2003 examined 160 adolescent sex offenders
- ◆ NIMH funded - MUSC (Henggeler, Letourneau)
- ◆ Collaborators: Office of the State's Attorney, Circuit Court of Cook County, Cook County Juvenile Probation, Kids Hope United (MST provider), Univ. of Illinois-Chicago (Schewe), Univ. of Missouri-Columbia (Borduin)

MST Program Development




- Program design and start-up
 - Program design and development
 - Program support activities
 - Staff training
- Critical elements of program implementation

MST Program Development




- | | |
|--|---|
| <ul style="list-style-type: none"> • Program Design <ul style="list-style-type: none"> – Community needs – Target population – Referral sources – Referral criteria <ul style="list-style-type: none"> √ Inclusionary √ Exclusionary* – Funding options – Program evaluation* | <ul style="list-style-type: none"> • Clinical Implementation <ul style="list-style-type: none"> – Case load size* – Supervision practices* • Staff training and support* <ul style="list-style-type: none"> – Adherence monitoring* – MST consultation* – Treatment discharge criteria* – Outcome tracking* |
|--|---|

* MST specific recommendations, requirements, or limitations

MST Program Support 

Purpose: To increase the likelihood of achieving positive outcomes through identifying and removing barriers to effective implementation of the MST treatment model.

- Program structure, specification, and goals
- Site Readiness Review meetings
- Outcome measurement systems that track treatment adherence and program drift

MST Staff Training 

Purpose: To achieve positive outcomes through the implementation of training and supervision protocols used in the clinical trials of MST.

- On-the-job training (weekly on-site supervision and MST expert case review)
- 5-Day orientation to MST
- Quarterly on-site booster training
- Development planning for all professionals

MST Staff Training 

- Staff training
 - Strength-based approach
 - Builds upon clinician’s skills and strengths in using empirically-based treatment approaches
 - MST principles establish adherence guidelines
 - Emphasizes the role of critical thinking and evidence-based decision making
 - Focuses on the key role of successfully engaging the client and other key stakeholders

Operational / Program Drift Indicators



- Key operational indicators collected via internet-based QA data system:
 - Caseload size (target: 5 cases per therapist, range: 4-6)
 - Duration of treatment (target: 120 days, range: 90-150)
 - Team size (range: 2-4 full time therapists)
 - TAM, SAM and CAM collection rates
 - Case closure status and instrumental markers
 - Outcomes (at home, in school, out of trouble with the law)
 - Sustainability indicators (e.g. staff openings not filled, funding commitments clear, etc.)

Critical Elements of Implementation



- Continuous Focus on Outcomes
- Fidelity to the Treatment Model
- Accessibility of Treatment
- Sustainable Funding Strategy

What influences these critical elements?

- Interagency collaboration
- Organizational support of the program
- Operational practices and policies

Influences of Other System Stakeholders



- Clearly defined target population, program goals and referral process
- Funding structure in place
- Ability of MST therapist to take the “lead” in clinical decision making
- Key stakeholders usually include:
 - Juvenile Justice, Family Court, Mental Health, Social Welfare, School systems, parent groups

Influences Within the Provider Organization

MST
Multisystemic Therapy

- Target MST compatible populations
- Clear understanding of MST at all levels
- Commitment to implement MST fully
- Willingness to modify policies and dedicate resources to achieve outcomes
 - Commitment to training and supervision
 - Policies (e.g. flex-time, transportation)
 - Resources (e.g. pay, cellular phones)

Influences within the Clinical Context/Team

MST
Multisystemic Therapy

- Clinical supervisor: committed, credible authority
- Sufficient allocation of supervisor’s time (full-time)
- Distinct and dedicated MST staff
- Low caseloads (4-6 families per clinician)
- Adherence to all QA protocols including weekly group supervision and expert MST consultation
- Adequate on-call coverage system
- MST training for all staff who can influence treatment
- Outcome-based discharge criteria

Characteristics of Successful MST Therapists

MST
Multisystemic Therapy

- Motivated, strong work ethic, feels accountable
- Flexible, creative, open minded
- Intelligent, common sense (“street smarts”)
- Can shift to family/ecology as client
- Open to peer supervision
- Volunteers to be trained
- Clinical acumen (e.g., pattern detection skills, prior exp. in family, marital, or behavioral work)
- Some background in child development

Potential Barriers in Therapists



- Years of practice without accountability for producing measurable client outcomes
- Wedded to non-empirically based theories
- Wants to work with children only
- Not open to peer supervision
- Conscripted to training
- Little experience working in non-office settings

QUESTIONS OR MORE INFORMATION



- Research Related: Scott W. Henggeler
<henggesw@musc.edu>
- Publication Requests: <musc.edu/fsrc>
- Dissemination/Site Development:
Marshall Swenson, 843 856-8226
<marshall.swenson@mstservices.com>
