BLUEPRINTS 2014

PUBLISHED MST RESEARCH FINDINGS
2012 - Present

Scott W. Henggeler, Professor
Medical University of South Carolina
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
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: on call system
• 3 to 5 months is the typical treatment time (4 months on average across cases)
• Work is done in the community, home, school, neighborhood: removes barriers to service access
34 published outcome, transportability and benchmarking studies including 23 randomized trials

- 13 with serious juvenile offenders
  - 4 independent studies
- 8 with adolescents with serious conduct problems
  - 7 independent studies
- 2 with substance abusing or dependent juvenile offenders
- 3 with juvenile sexual offenders
- 3 with youths presenting serious emotional disturbance
- 2 with maltreating families
- 4 with adolescents with chronic health care conditions
  - Diabetes and obesity
- 3 large-scale transportability (dissemination) studies
Research findings have enabled MST to be used as a key component of system change. Two Examples:
- Chile
- UK/Essex Social Impact Bonds
Chile

Slides credit to: Cecilia Tijmes, Ministry of the Interior and Public Security
General Background

Goals of the 2010-2014 Plan Chile Seguro

- Reduce the percentage of households victims of crime by 15%
- Reduce the amount of crimes in public areas by 25%
Process to Implement MST in Chile 2012-2013

Phase 0:

- MST Services Representatives visit Chile to familiarize with the realities of Chile and assess the feasibility of the implementation in 2011
- Multisystemic Therapy Conference in Santiago open to professionals of related institutions
- Agreement between the Subsecretary of Crime Prevention and MST Services to implement MST starting 2012
Process to Implement MST in Chile 2012-2013

Phase 1: La Pintana, Pudahuel, La Florida and Puente Alto

- Translation of documents and protocols
- Process of selection of therapists and supervisors
- Site Assessment
- 5 day training for MST teams.
- Services started August 2012.
Process to Implement MST in Chile 2012-2013

Phase 2: Peñalolén, Recoleta, La Granja and Lo Espejo
  ▪ Teams started September 2012

Phase 3: San Bernardo, Maipú and Valparaíso*
  ▪ Teams started February 2013

Phase 4: Puerto Montt, Temuco and Los Ángeles
  ▪ Teams started May 2013

Phases 5-7: 11 additional teams scheduled to start

Total of 25 teams by the end of 2014
MST - Part of Innovative Approach Using Social Investment to increase funding for effective services

Essex County, UK

Credit for Slides: Cathy James, Department of Health
Essex Faces Formidable Challenges

- Predominance of high cost residential placements
- Higher proportion of older adolescents with behavioral issues in care
- Poor parenting support in particular around managing behavior
- Underdeveloped early intervention and family support services
- Lack of higher level intensive interventions and limited resources to establish them
- Vicious circle: wrong service offer, young people in care unnecessarily, pressure on budgets, reducing available investment

Steven H. Goldberg, February 4, 2013
What Private Investment in Future for Children Bonds Could Mean for the Growth of MST

- Possible expansion in ways that government spending and philanthropy can’t provide
- Attractiveness of well-evidenced programs to investors
- Impact investment might work a lot better
- Working with new kinds of partners
If we want civic-minded affluent people to make a lot more money available for social purposes, they need to know they’ll eventually get it back.

Philanthropy is disposable; social investment is recyclable.

Steven H. Goldberg, February 4, 2013
• SIBs and other social investments don’t make money more important than helping people
• The only way they make any money for investors at all is if they do help people
• Future for Children Bonds provide a small financial incentive for investors to pay for more MST
• Could reduce the number of children taken from their homes and save government a lot of money

Monetization creates an entirely new source of funding that doesn’t compete with limited government budgets or donations.

Steven H. Goldberg, February 4, 2013
Social investing has the potential to significantly change how we fund social programs
Measurement of Implementation Components
Ten Years after a Nationwide Introduction of Empirically Supported Programs - A Pilot Study

Terje Ogden, Gunnar Bjornebekk, John Kjobli, Joshua Patras, Terje Christiansen, Knut Taraldsen, and Nina Tollefsen

University of Oslo

Implementation Science (2012)
Study Aim and Design

Compare implementation profiles of two evidence-based programs (MST vs. Oregon Parent Management Training [PMTO]) based on therapist, supervisor, and leadership reports 10 years after nationwide dissemination.

93 PMTO respondents and 56 MST respondents were surveyed.
“The strong focus on implementation in MST and PMTO has paid off 10 years after the programs were introduced in Norway by revealing a strong and ongoing presence with agencies, and a relatively long median lifespan of program practitioners.”
MST Rated Higher than PMTO in:

- Recruitment - practitioner selection
- Training - initial acquisition of key skills
- Supervision/coaching
- Performance assessment - tracking integrity
- Data systems for stakeholder feedback
- Administrative restructuring to support program implementation
- Interventions with community systems to support program implementation
A Randomized Controlled Trial of MST and a Statutory Therapeutic Intervention for Young Offenders

Stephen Butler, Geoffrey Baruch, Nicole Hickey, and Peter Fonagy

University College London, Brandon Centre, and Imperial College

Journal of the American Academy of Child & Adolescent Psychiatry (December, 2011)
Design

- Randomized, independent effectiveness trial (conducted with community-based therapists)
- 108 juvenile offenders
- Control condition: Tailored range of extensive and multicomponent evidence-based interventions
- 18-month post treatment follow-up
Results

- Reduced offenses (41%)
- Reduced placements (41%) during the last 6 months
- Reduced self-reported and parent-reported delinquency
- Improved parenting
- Reduced psychopathic symptoms
MST for Young Offenders: Families’ Experiences of Therapeutic Processes and Outcomes

Andrea Tighe, Nancy Pistrang, Lucy Casdagli, Geoffrey Baruch and Stephen Butler

University College London and The Brandon Centre

Journal of Family Psychology (2012)
Qualitative study (37 interviews) explored parents’ and youths’ experiences of MST, and identified 2 overriding domains that prompted or limited therapeutic change.

1. Engagement in MST and Initial Process of Change
2. Outcomes are Complex
Engagement and Initial Process of Change

- Families appreciated flexible scheduling
- Holistic approach (working with multiple systems)
- Solution-focused, practical approach, providing observable benefits
- Strong therapeutic relationship: A person-centered, collaborative approach
- Therapist as source of support: Companion, counselor, motivator, mediator
Outcomes Are Complex (rarely clear-cut)

- Increased parental confidence and skills
- Relationships improve
- Young person choosing to create a different future
- Behavior mostly improves
- Not all targets are met or situation deteriorates after therapist leaves
Economic Evaluation of Multisystemic Therapy for Young People at Risk for Continuing Criminal Activity in the UK

Maria Cary, Stephen Butler, Geoffrey Baruch, Nicole Hickey, & Sarah Byford

University College London, Brandon Centre, and Imperial College

Cost Offset Analysis

- Design: 18-month post treatment follow-up
- Findings: MST associated with cost savings related to crime reduction
Higher Education Reform on EBPs: The Connecticut Transformation Initiative

Elisabeth Cannata and Michael A. Hoge

Wheeler Clinic and Yale University

*Emotional & Behavioral Disorders in Youth* (2012)
The Problem

Despite calls to action, graduate school curricula have continued to lag behind demands for a workforce better prepared to implement evidence-based practice. For example, 57% of new clinicians were rated by supervisors as minimally prepared for evidence-based practice (3% were very prepared).
By 2008, 22 provider agencies offered 8 EBPs.

Program managers across Connecticut reported great challenges in hiring viable clinicians.

University faculty were “lukewarm” about teaching EBP related skills.
Solution: Curriculum Development

“Current Trends” curriculum

- 14-week, 3 credit graduate level course developed with SAMHSA funding
- Goal of course: promote accurate understanding of and interest in EBP models
- Didactic, active learning, and outside presentations, including from families
Course Toolkit

- Reading lists and all materials from the lists
- Sample syllabus
- Power point presentations
- Lesson plans
- Tools for skill building activities
- Videos
- Sample exam questions
- Topics for semester projects
- Certificates of course completion

ALSO - Extensive training and quality assurance of faculty
Results

17 faculty members from 11 graduate schools have been trained.
Course has been offered 20 times.
270 students have completed the course.
Course is now required in 2 programs and is a regularly scheduled elective in 8 programs.
A Randomized Controlled Trial of the Effectiveness of Multisystemic Therapy in the Netherlands: Post-Treatment Changes and Moderator Effects

Jessica Asscher, Maja Dekovic, Willeke Manders, Peter van der Lann and Pier Prins

University of Amsterdam and Utrecht University

Journal of Experimental Criminology (2013)
Study Design

MST vs. Treatment as Usual (TAU; community-based individual and family interventions)

N = 256 adolescents (55% Dutch, 45% ethnic minorities; “severe and violent antisocial behavior”)

Timing of assessments: baseline, monthly through 6 months post baseline
Results

- Decreased youth antisocial behavior
- Increased parental sense of competence
- Increased positive discipline
- Improved relationship quality
- Increased youth association with prosocial peers
Within-Intervention Change: Mediators of Intervention Effects During MST

Maja Dekovic, Jessica J. Asscher, Willeke A. Manders, Pier J. M. Prins, & Peter van der Lann

Utrecht University and University of Amsterdam
De Waag and Yorneo in the Netherlands

MST Theory of Change

MST

Improved Family Functioning

Peers

School

Community

Reduced Antisocial Behavior and Improved Functioning
Measures
* = MST Treatment Effect

Parental sense of competence*
Positive discipline* (consistency, monitoring, appropriate discipline)
Inept discipline (harsh, love withdrawal)
Relationship quality* (acceptance, low conflict)
Externalizing problems* (CBCL, SRD)
Increased parent sense of competence → increased positive discipline → decreased externalizing problems

Increased parent sense of competence → improved relationship quality
“The increases in sense of competence may motivate parents to be more persistent in attaining their goals, following through their discipline efforts, and thus becoming more consistent in their behavior toward the adolescent.”
Conclusions

Changes in relationship quality did not predict decreased behavior problems

** “During first month of treatment quality of parent-adolescent relationship actually deteriorated, possibly due to parents’ newly acquired skills in limit setting and supervision.”

But relationship quality improved in subsequent months to well above TAU.
Psychopathy as Predictor and Moderator of Multisystemic Therapy Outcomes among Adolescents Treated for Antisocial Behavior

Willeke Manders, Maja Dekovic, Jessica Asscher, Peter van der Laan, and Pier Prins

University of Amsterdam and Utrecht University

Journal of Abnormal Child Psychology (2013)
Findings

Favorable MST effects on externalizing problems were moderated (attenuated) for youth with high narcissism and callous traits.
Sustainability of the Effects of MST for Juvenile Delinquents in the Netherlands: Effects on Delinquency and Recidivism

Jessica Asscher, Maja Dekovic, Willeke Manders, Peter van der Laan, Pier Prins, & Sander van Arum

University of Amsterdam and Utrecht University

Journal of Experimental Criminology (2014)
Design and Findings

• Follow-up to Asscher et al. (2013)
• 12-month follow-up on parent and adolescent reports of antisocial behavior
• 3-year follow-up on judicial data
• Favorable 12-month outcomes were sustained
• No treatment effects were observed based on recidivism data (MST and TAU both had 71% rearrest rates)
Multisystemic Therapy を用いた社会的逸脱行動事例への介入

大宮 宏一郎 　(対立行動を含む)** / 富田 拓郎 　(対立行動を含む)**

下田 俊 　(対立行動を含む)**

1. 問題と目的
社会的逸脱行動事例への介入は重要である。特に、社会的問題を伴う（以下、SC）が、介護されたことで、心理臨床家が「軽行少年」や「非行少年」を対象としての介入機会を格段に増している（伊藤, 2002）。武田ら（2008）が、現状するように、心理臨床家による効果的・社会的行動問題の対応に関する研究、および SC による心理的・社会的問題の報告は、依然少ない状況にある。
そこで、本研究では、暴力的・社会的行動を呈する少年への介入法として世界的に注目を集める Multisystemic Therapy（以下、MST：Henggeler et al. 1998/2008）を用いた事例について報告する。本論の展開に当たっては、少年法に規定されている内容を伴行として、少年を介護されていないものも社会的逸脱行動とする。

2. MST の概要
MST とは、米国サウスカロライナ医科大学精神医学行動科学部の Henggeler 教授らを中心

神医学行動科学部の Henggeler 教授らを中心

に展開された手法である。障害的な社会的行動や

その他の問題を伴う社会的問題を抱える少年を対象と

し、家庭やコミュニティを基盤に集中的な介入を

実施する。この技法の介入効果は多くの研究から

実証されている（Schaefeler et al. 2006；Klett

et al. 2010）。現在では米国だけでなく欧州諸国を

中でも実施されているほか、わが国では、吉川ら

（2008, 2009）や大貫（2010）により、介入実

施とその効果が報告されている。

MST の介入では、MST サーバーサイジングを介

する必要がある。サーバーの役割を果たすと同時に、介

入プロトコルに従い（表 1；吉川ら, 2008 年間）、

家庭訪問による面接を週に数回程度実施する。介

入中は、週 7 日、1 日 24 時間体制で家族からの

要情に応え、3～5 カ月程度で終了することが通

例である。MST では、少年の行動が社会ネット

ワーク（家族、学校、学校、地域社会）と

の相互作用によって生じ、維持されているという

社会生態系理論（Bronfenbrenner, 1979）に基づ

く問題行動理解を行う。そして、少年に最も強い

影響力をもつ順番者と行動相関を結び、行動療

法（宮下, 2007 参照）や家族療法（Minuchin


照）などの技法を用いて、少年をとりまく社会

ネットワーク間の相互作用の変容を含めた介入を

行う。介入中は、家族のストレングス（長所）
Examining Therapist Comfort in Delivering Family Therapy in Home and Community Settings

Tatiana Glebova, Sharon L. Foster, Phillippe B. Cunningham, Patricia A. Brennan and Elizabeth Whitmore

Alliant International University, MUSC, Emory University and University of Colorado

Psychotherapy (2012)
Examined therapists’ feelings of comfort (cleanliness of home, comfort interacting with family) and safety (physical safety of neighborhood) when delivering family services in community-based settings

185 families treated by 51 MST therapists

Therapists were relatively young (2.6 years post degree) and inexperienced (9.5 months as MST therapist)
Findings

Low therapist feelings of comfort/safety associated with:

- Low therapeutic alliance (therapist reported, not associated with caregiver reported alliance)
- Treating low-income families in poor neighborhoods
- Having less favorable attitudes toward MST
MST Compared to Telephone Support for Youth with Poorly Controlled Diabetes: Findings from a Randomized Controlled Trial

Deborah A. Ellis, Sylvie Naar-King, Xinguang Chen, Kathleen Moltz, Phillippe B. Cunningham, and April Idalski-Carcone

Wayne State University and the Medical University of South Carolina

Annals of Behavioral Medicine (2012)
Design

- Randomized controlled trial
- 146 adolescents with type 1 or 2 diabetes
- Control condition: Standard medical care enhanced with weekly telephone support for improving regimen adherence and metabolic control
- 12-month follow-up
• MST was more effective at improving metabolic control at 7 and 12 months.
• Parents of adolescents receiving MST reported greater improvements in treatment adherence by their youth (adolescent-reported adherence was unchanged).
Comprehensive Treatment for Co-Occurring Child Maltreatment and Parental Substance Abuse: Outcomes from a 24-Month Pilot Study of the MST-Building Stronger Families Program

Cindy Schaeffer, Cynthia Swenson, Elena Tuerk, & Scott Henggeler

Medical University of South Carolina

Child Abuse & Neglect (2013)
Design

- Single group pre-post; and quasi-experimental with 24-month follow-up
- 43 families with co-occurring parental substance abuse and child maltreatment
- Control condition was comprehensive community treatment
Findings

• Pre-post in single group design: Mothers reduced substance use and depression, improved parenting; Youth decreased anxiety

• 24-month follow-up in quasi-experimental design: Decreased maltreatment and time youth spent in out-of-home placement
Long-Term Prevention of Criminality in Siblings of Serious and Violent Juvenile Offenders: A 25-Year Follow-Up to a Randomized Clinical Trial of MST

David Wagner, Charles Borduin, Aaron Sawyer, & Alex Dopp

University of Missouri

Journal of Consulting and Clinical Psychology (2014)
Parent study: The Borduin et al. (1995) RCT comparing MST vs. individual therapy (IT) with 176 serious juvenile offenders

- Present study participants: 129 closest in age siblings
- 25-year follow-up - mean age of siblings = 38.4 years
- Arrest rate: MST = 43%; IT = 72%
- IT siblings 3X the felony rate as MST siblings
- IT siblings 2X the incarceration rate
The Economic Impact of MST through Midlife: A Cost-Benefit Analysis with Serious Juvenile Offenders and Their Siblings

Alex Dopp, Charles Borduin, David Wagner, & Aaron Sawyer

University of Missouri

Journal of Consulting and Clinical Psychology (2014)
Design and Findings

Parent study: The Borduin et al. (1995) RCT comparing MST vs. individual therapy (IT) with 176 serious juvenile offenders

- Present study includes original youths and 129 closest-in-age siblings in a 25-year follow-up
- Examined (a) taxpayer costs (e.g., community supervision, incarceration) and (b) crime victim costs (e.g., property damage, medical care, pain and suffering)
- Cumulative benefit of MST = $35,582 per juvenile offender and $7,798 per sibling
Two-Year Follow-Up of a Randomized Effectiveness Trial Evaluating MST for Juveniles Who Sexually Offend

Elizabeth Letourneau, Scott Henggeler, Michael McCart, Charles Borduin, Paul Schewe, & Kevin Armstrong

Johns Hopkins University, Medical University of South Carolina, University of Missouri, and University of Illinois-Chicago

Journal of Family Psychology (2013)

- 2-year follow-up for self-report measures and recidivism
- MST results sustained for problem sexual behavior, self-reported delinquency, and out-of-home placements
- Treatment effects not found for criminal recidivism
“Our present fractured system of care, problematic insurance structures, and limited public funding streams create obstacles to deploying evidence-based modalities such as MST. Yet, for the clinician in the community, MST is something to advocate for when consulted on cases or policies by local school authorities and government officials. We know what works but the challenge is figuring out how to get it to the young people who need it most.”
The Swedish Implementation of Multisystemic Therapy for Adolescents: Does Treatment Experience Predict Treatment Adherence?

Cecilia Lofholm, Kyle Eichas, & Knut Sundell

Lund University, Tarleton State University, National Board of Health and Welfare

2003: MST programs started in Sweden -- 7 teams comprising the first wave of implementation

2004-2005: RCT conducted by Sundell et al. (2008)
- No treatment effects
- Low treatment adherence
- Treatment adherence associated with arrest

2005-2006: 3 MST teams added, comprising the second wave of implementation

2007: MST Sweden (NP) began supporting MST implementation in Sweden

2003-2009: The time period examined by Lofholm et al. (2014)
Study Purpose and Methods

To examine how therapists’ adherence to MST and youth outcomes varied from 2003-2009

Participants
- 973 youth referred from child welfare for severe behavior problems
- 68 therapists, 21 supervisors, 10 teams, 4 consultants

Measures
- TAM (total sum of item scores)
- Youth at home, in school, no arrest (therapist report)
- Implementation wave (first or second)
- Years of team activity (0 to 5)
- Therapist experience (# of families treated)
Findings

- High TAM predicted greater likelihood youth was at home, in school, and had no arrests (replicating findings from previous research)
- High therapist experience predicted greater likelihood youth was at home (new finding)
- Implementation wave and years of team activity predicted higher TAMs (extremely important new findings), which predicted better outcomes. For example, second wave therapists had first-year TAMs higher than the third-year TAMs of first wave therapists (see Figure 3 in manuscript).
FIGURE 3 Averaged total treatment adherence (TAM) score by Years of Team Activity and Implementation waves
Why are Wave and Team Experience Findings So Important?

- They explain the poor outcomes of Sundell et al. (2008). Low adherence is associated with poorer outcomes, and therapist adherence was the lowest during that study.

- Findings demonstrate the value (i.e., steadily improved adherence and outcomes) of continued quality assurance - “implementation is best considered a continuous process.”

- More experienced teams and organizations seem to better support therapist adherence - supporting anecdotal views of optimal sites for MST expansions and adaptation pilots.
Finally, a Critical Implication for Research

“An outcome evaluation that is initiated during early stages of implementation may result in a failure to find effect of the intervention, thus making it paramount to secure adequate treatment adherence before recruiting clients.”