Multisystemic Therapy (MST) Overview

Presented by

MST Services

Revised - 11/06/14

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

MST Presence Around the World

34 states in the US

- Statewide infrastructures in Connecticut, Hawaii, New Mexico, North Carolina, Ohio, Pennsylvania, and Louisiana

15 countries

- Australia
- Belgium
- Canada
- Chile
- Denmark
- England
- Iceland
- Netherlands *
- New Zealand
- Northern Ireland
- Norway *
- Scotland
- Sweden
- Switzerland

* Nationwide infrastructures with an emerging nationwide infrastructure in England

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

Standard MST Referral Criteria (ages 12-17)

MST® Multisystemic Therapy

Inclusionary Criteria

- Youth at risk for placement due to anti-social or delinquent behaviors, including substance abuse
- Youth involved with the juvenile justice system
- Youth who have committed sexual offenses in conjunction with other anti-social behavior

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

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), and Center for Substance Abuse Prevention (CSAP)
- Washington State Institute for Public Policy (WSIPP)
- "Blueprints for Violence Prevention"

Surgeon General's Reports

- **MST is the only treatment to qualify for inclusion in the Surgeon General's Report on Mental Health under Home-Based Services.**

  (Mental Health: A Report of the Surgeon General, 1999)

- **MST is highlighted in the Surgeon General's Report on Youth Violence as an effective treatment program for adolescent criminal offenders**

  (Youth Violence: A Report of the Surgeon General, 2001)

US Department of Justice - OJJDP

- MST offers new hope to young people with serious behavioral disorders.
- MST has demonstrated decreased criminal activity and incarceration in studies with violent and chronic juvenile offenders, and results are promising in studies of other populations that present complex clinical problems. *(OJJDP Bulletin, 1997)*

Preventing Violence… in Adolescents: National Institutes of Health State-of-the-Science Conference

- Multisystemic Therapy… evaluations have demonstrated reductions in long-term rates of rearrest, violent crime arrest, and out-of-home placements. Positive results were maintained for nearly 4 years after treatment ended.

(NIH Preventing Violence State-of-the-Science Conference Statement, 2005)

MST and Substance Abuse Services

- National Institute of Drug Abuse
  - Highlights MST as an effective research-based treatment program *(Principles of Drug Addiction Treatment: A Research-Based Guide, NIDA, 1999)*
- Center of Substance Abuse Prevention
  - 2000 Exemplary Substance Abuse Prevention Award
- Center of Substance Abuse Treatment
  - Identified as a strategy for integrating Substance Abuse Treatment into the Juvenile Justice System

Cost Effectiveness of MST

- Washington State Institute for Public Policy (2011)
  - Evaluating "evidence-based" options to reduce the future need for prison beds, save money, and lower crime rates.
  - Estimated net taxpayers benefits for using MST in lieu of placement: $29,302/youth
  - Benefits of $4.07 for every $1.00 invested in MST implementation

Blueprints For Violence Prevention

- Objective: find programs to form the nucleus of a national violence prevention initiative – 11 programs have been selected to date
- Selection standards: strong research design, evidence of significant deterrence effects, multi-site replication, and sustained effects.
- Comprehensive review of more that 900 programs -- MST is a Blueprint for serious, violent and/or substance abusing youth

How Does MST Work?

MST®
Multisystemic Therapy

Key Points:

- Theoretical And Research Underpinnings
- MST Theory of Change and Assumptions
- How is MST Implemented?

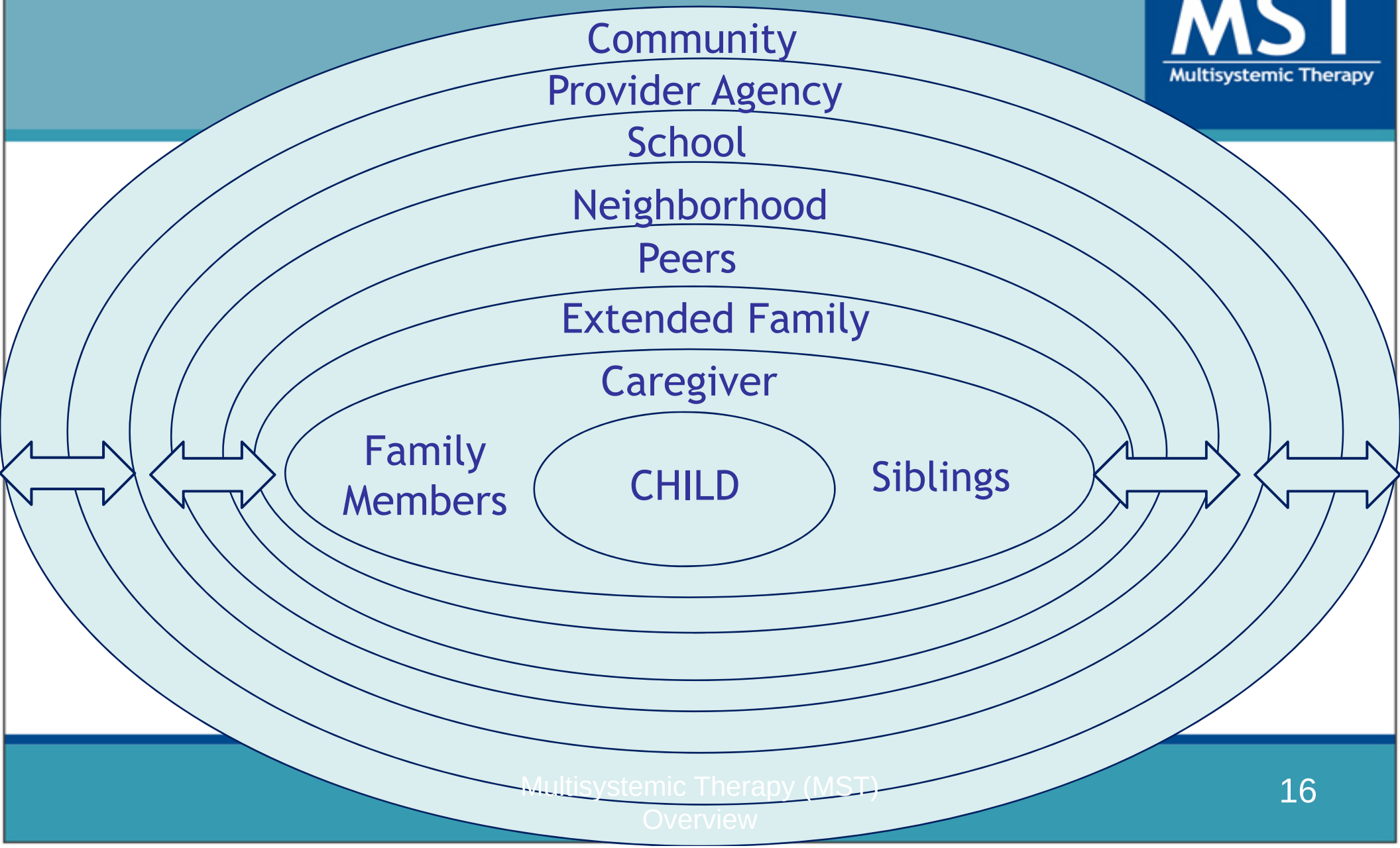
Theoretical Underpinnings

MST® Multisystemic Therapy

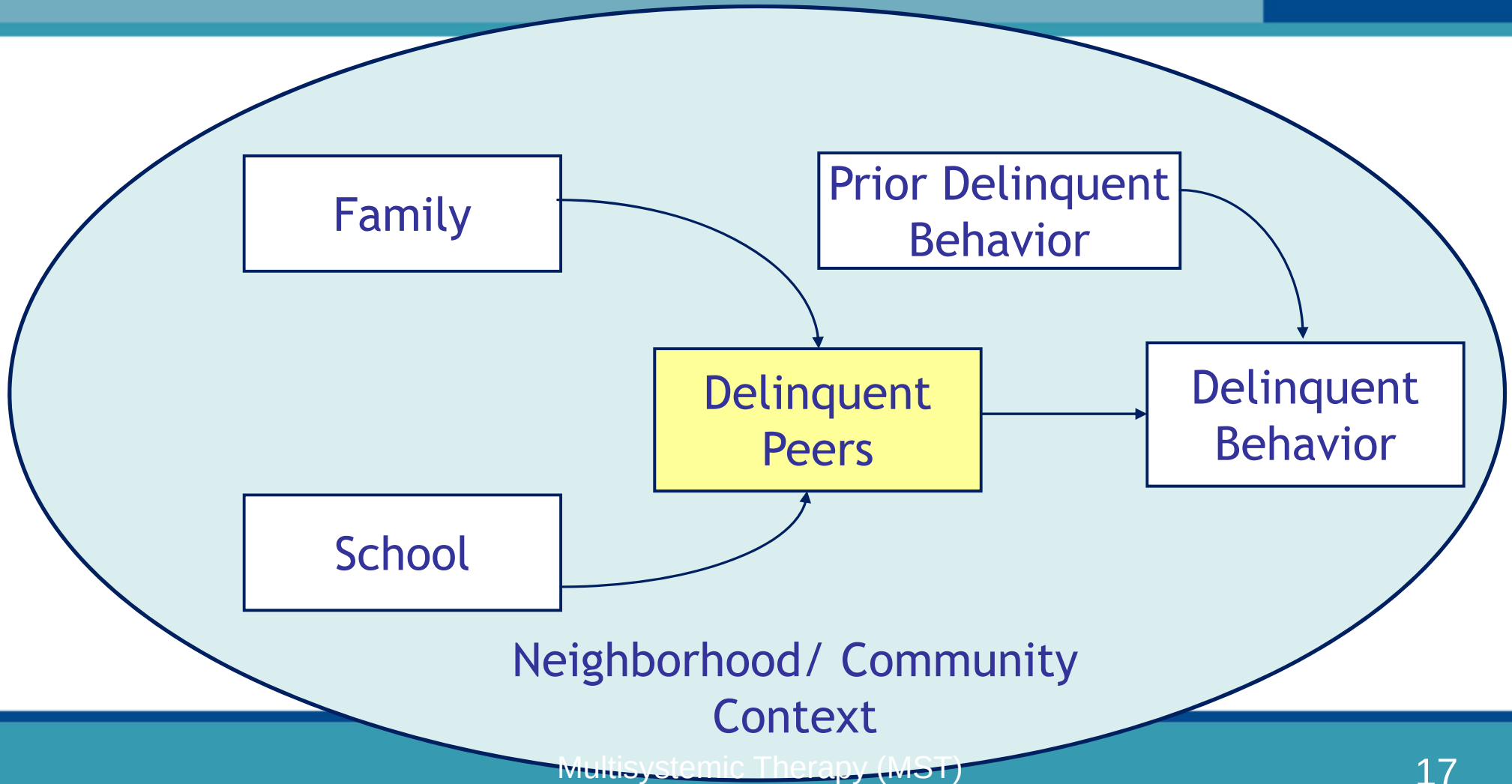
Based on social ecological theory of Uri Bronfenbrenner

- 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



Causal Models of Delinquency and Drug Use: Common Findings of 50+ Years of Research



Research on Delinquency and Drug Use

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Family Level

- Poor parental supervision
- Inconsistent or lax discipline
- Poor affective relations between youth, caregivers, and siblings
- Parental substance abuse and mental health problems

Research on Delinquency and Drug Use (Cont.)

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Peer Level

- Association with drug-using and/or delinquent peers
- Poor relationship with peers, peer rejection
- Association with antisocial peers is the most powerful direct predictor of delinquent behavior!

Research on Delinquency and Drug Use (Cont.)

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School Level

- Academic difficulties, low grades, having been retained
- Behavioral problems at school, truancy, suspensions
- Negative attitude toward school
- Attending a school that does not flex to youth needs

Research on Delinquency and Drug Use (Cont.)

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Community Level

- Availability of weapons and drugs
- High environmental and psychosocial stress (violence)
- Neighborhood transience – neighbors move in and out

Research on Delinquency and Drug Use (Cont.)

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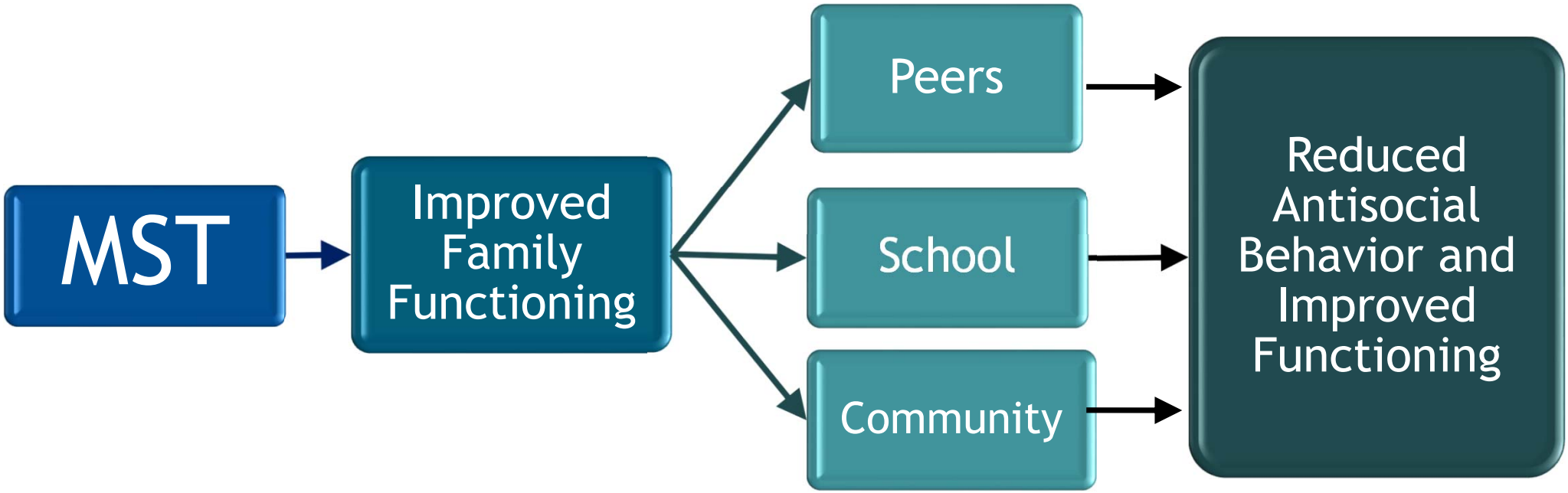
Youth Level

- ADHD, impulsivity
- Positive attitude toward delinquency and substance use
- Lack of guilt for transgressions
- Negative affect

MST Theory of Change



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

MST Assumptions (Cont.)

- 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

How is MST Implemented?

MST® Multisystemic Therapy

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 is MST Implemented? (Cont.)

- 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

How is MST Implemented? (Cont.)

- MST staff deliver all treatment – typically no or few services are brokered/referred outside the MST team
- Never-ending focus on engagement and alignment with primary caregiver and other key stakeholders (e.g. probation, courts, children and family services, etc.)
- MST has strong track record of client retention and satisfaction with MST
- MST staff must be able to have a "lead" clinical role, ensuring services are individualized to strengths and needs of each youth/family

Quality Assurance and Continuous Quality Improvement in MST

Goal of MST Implementation:

- Obtain positive outcomes for MST youth and their families

QA/QI Process:

- Training and ongoing support (orientation training, boosters, weekly expert consultation, weekly supervision)
- Organizational support for MST programs
- Implementation monitoring (measure adherence and outcomes, work sample reviews)
- Improve MST implementation as needed, using feedback from training, ongoing support, and measurement

QA/QI Process: Training and Support

- Training and support to help therapists, supervisors, and experts implement the model as designed
  - Training processes (5-day Orientation, Supervisor Orientation, Boosters, Consultation, Group Supervision, and additional supervision and feedback for all staff as needed)
  - Training materials (MST text, 5-day training materials, Supervisory Manual, Supervisor Orientation materials, and Consultation Manual)

QA/QI Process: Organizational Support for MST Programs

- Training resources and materials in organizational practices that support MST
  - Program Developer Training
  - Organizational Manual
- Implement organizational practices needed to support delivery of the treatment model
  - MST Program Development Method
  - Ongoing problem solving of organizational and stakeholder barriers to implementation

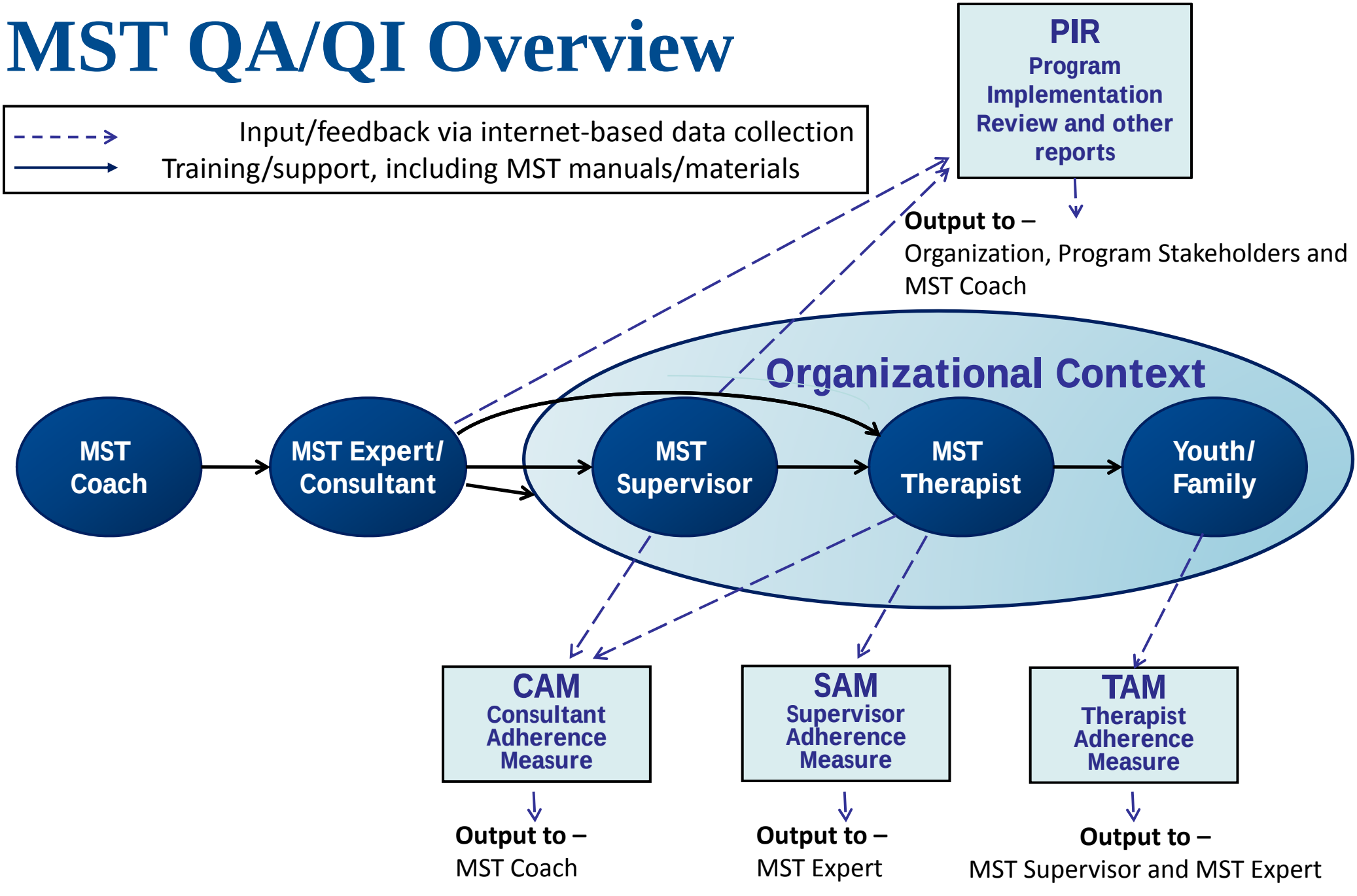
QA/QI Process: Monitor Implementation of the Model

- Measure Adherence to the Model
  - Adherence measures entered and monitored via the MSTI Website (TAM-R, SAM, CAM, Program Review Form)
  - Work sample review (e.g. session recordings and field visits, group supervision recordings)
- Measure Outcomes
  - Discharge Review Form data entered and monitored via the MSTI Website

QA/QI Process: Improve Implementation of MST as Needed

- Improve implementation as needed, based on the information provided via measurement of adherence, outcomes, and staff's strengths and needs
  - Group supervision, consultation, and additional supervision and feedback as needed
  - Program Implementation Review
  - Professional development planning
- Follow an ongoing cycle of utilizing trainings and materials to guide implementation, measuring, and improving implementation

MST QA/QI Overview

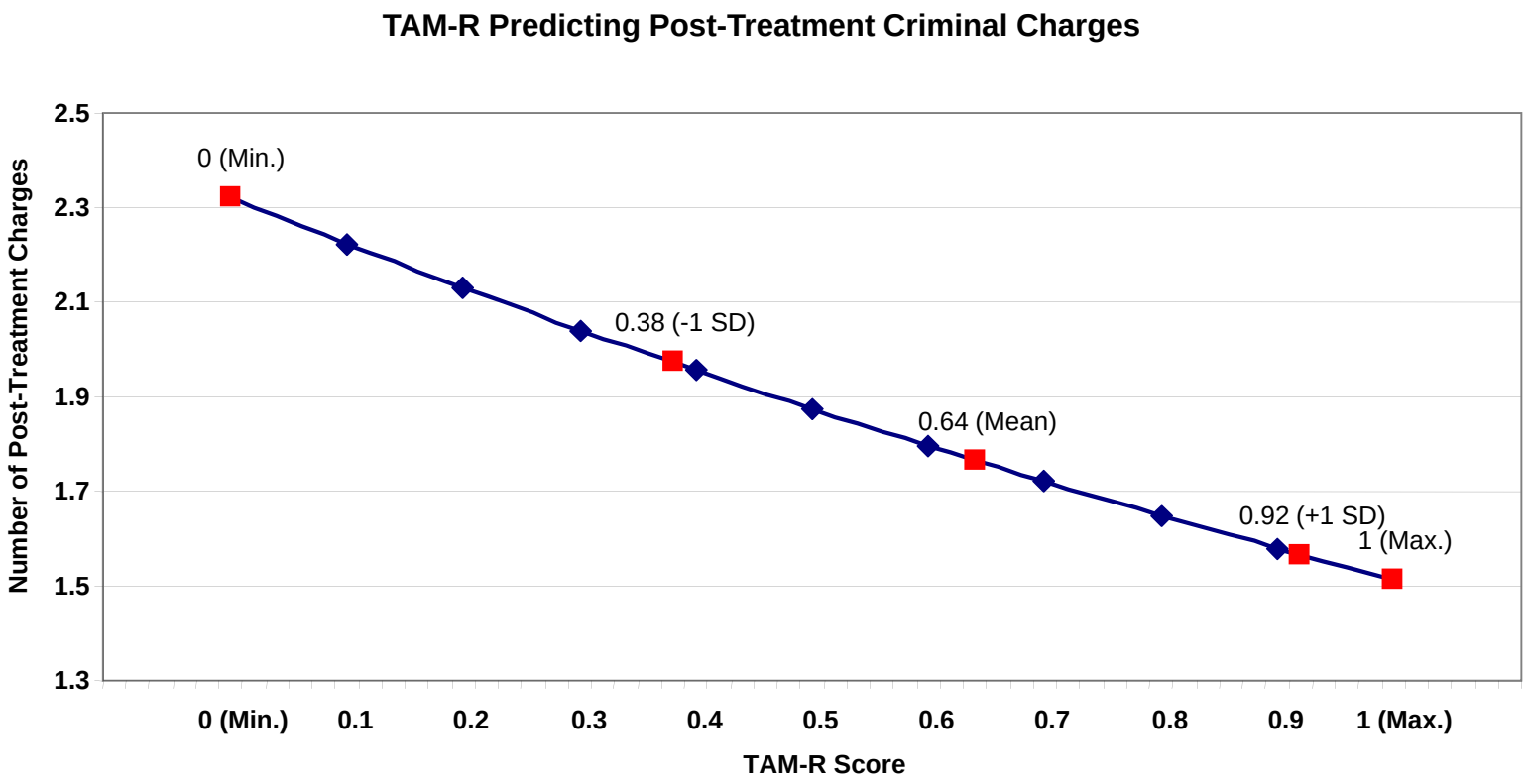


MST Quality Assurance System

Research-based adherence measures:

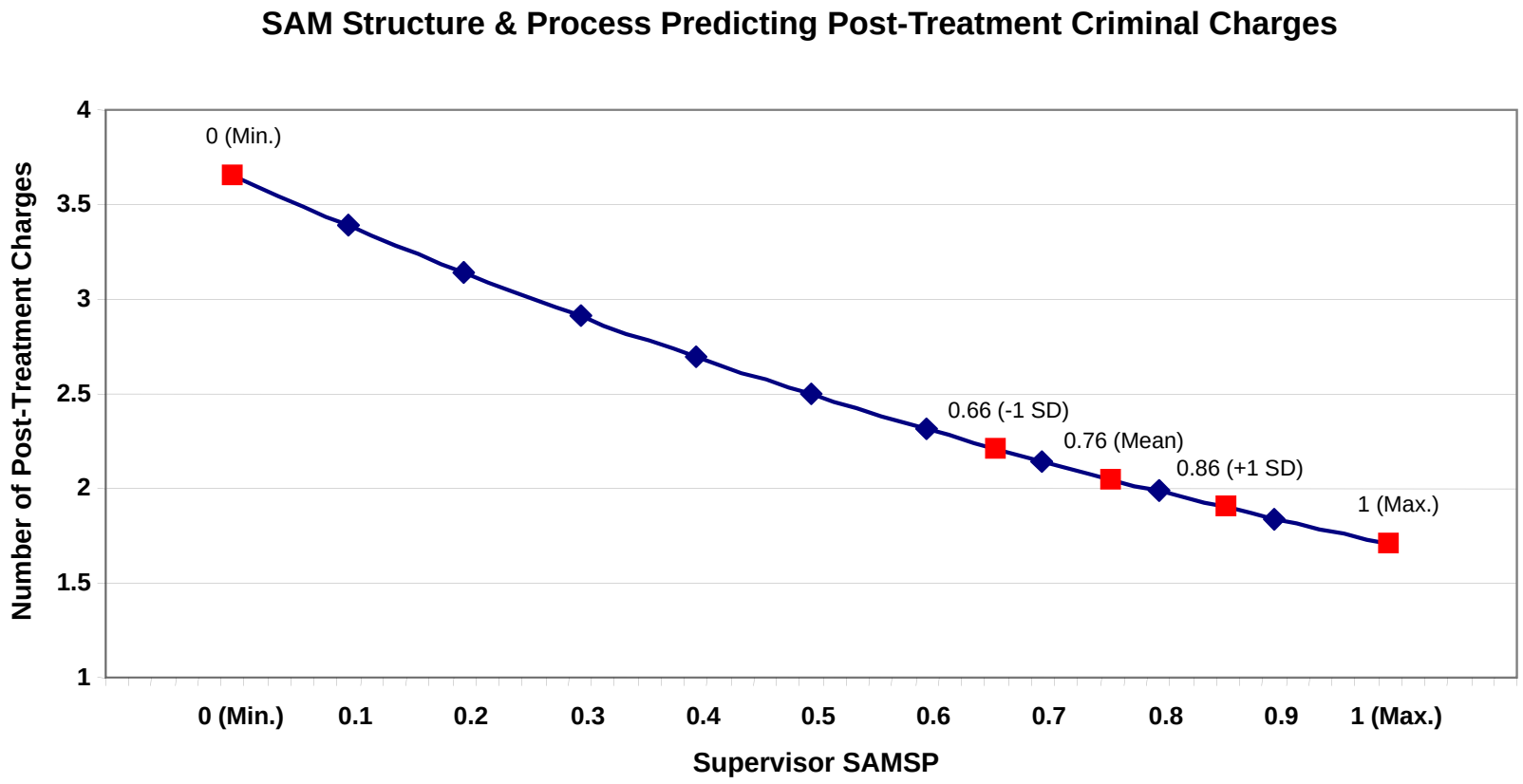
- TAM – youth criminal charges 36% lower for families with maximum adherence score (1) than for families with minimum adherence score (0)
- SAM – youth criminal charges 53% lower for families with maximum SAMSP score (1) than for families with minimum SAMSP score (0)
- CAM – consultant/MST expert adherence predicts improved therapist adherence and improved youth outcomes

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



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

MST® Multisystemic Therapy



Core Elements of MST

MST®
Multisystemic Therapy

Key Points:

- MST Treatment Principles
- MST Analytic Process
- MST Quality Assurance System

MST Treatment Principles

- Nine principles of MST intervention design and implementation
- Treatment fidelity and adherence is measured with relation to these nine principles

9 Principles of MST

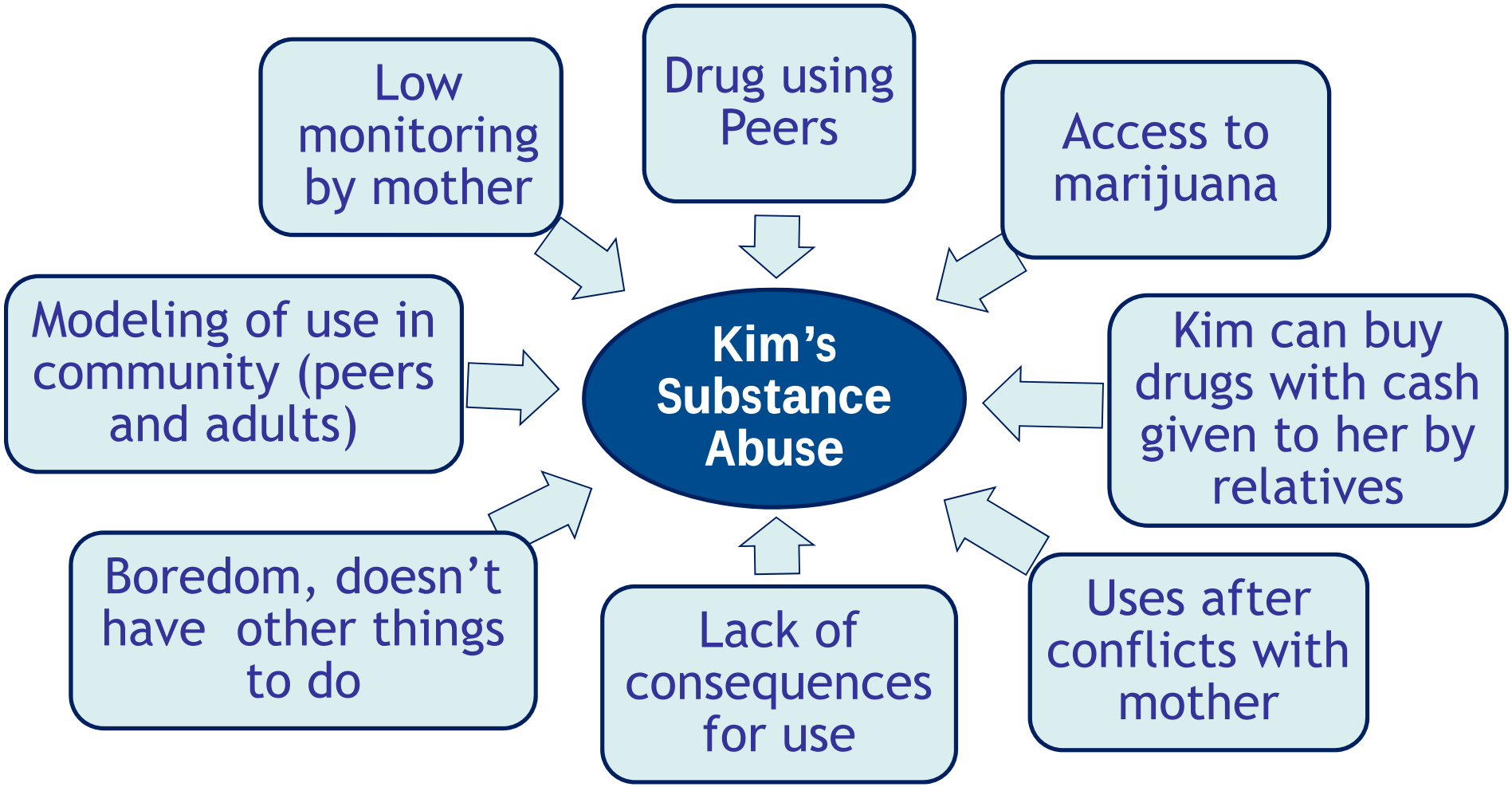
MST®
Multisystemic Therapy

1. Finding the Fit
2. Positive and Strength Focused
3. Increasing Responsibility
4. Present-focused, Action-Oriented & Well-Defined
5. Targeting Sequences
6. Developmentally Appropriate
7. Continuous Effort
8. Evaluation & Accountability
9. Generalization

1. Finding the Fit:

The primary purpose of assessment is to understand the "fit" between the identified problems and their broader systemic context

MST® Multisystemic Therapy



Principles of MST (Cont.)

MST® Multisystemic Therapy

2. Positive & Strength Focused

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

Principles of MST (Cont.)

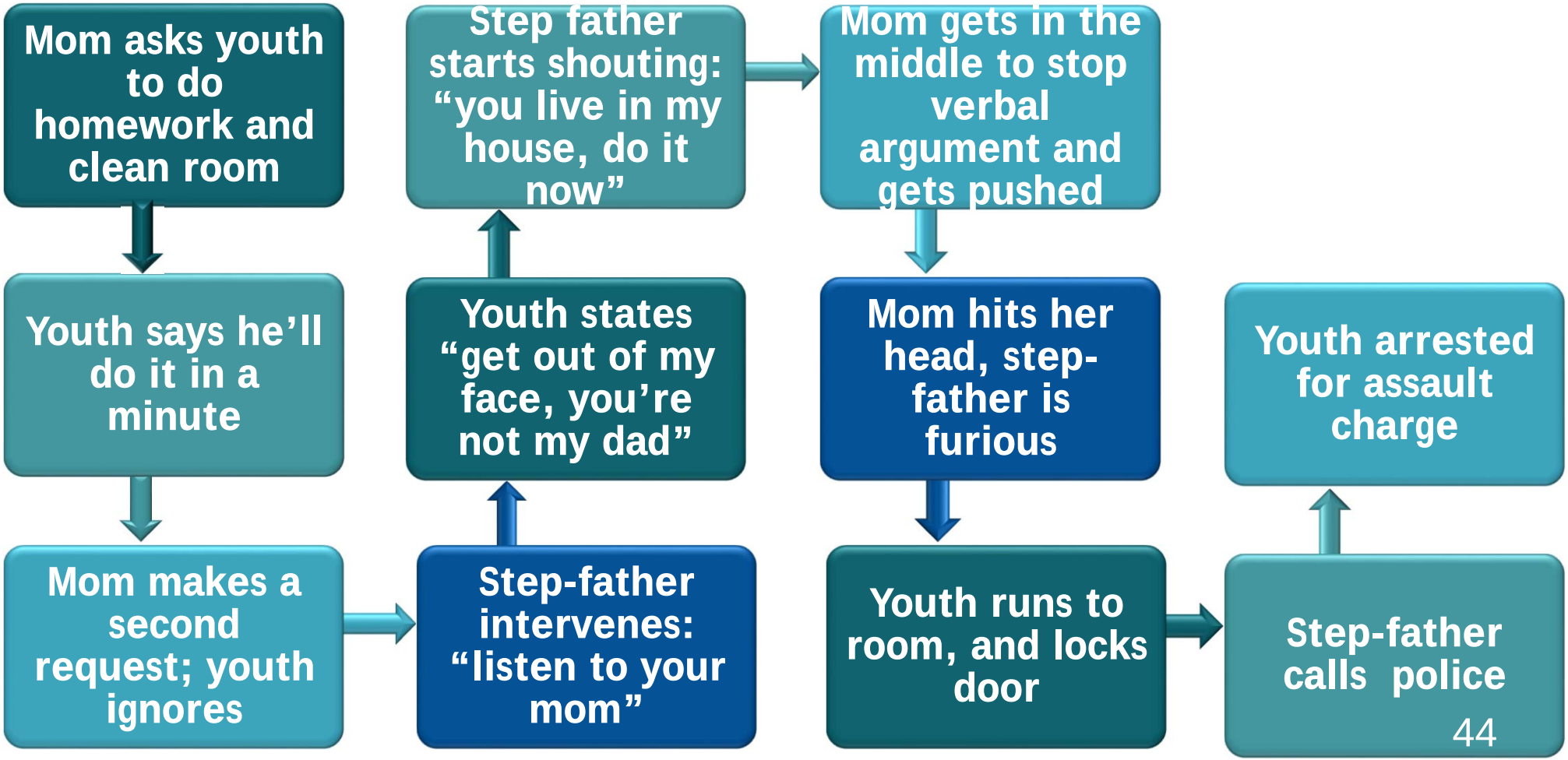
3. Increasing Responsibility

   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.

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



Principles of MST (Cont.)

6. Developmentally Appropriate

   Interventions should be developmentally appropriate and fit the developmental needs of the youth.

Principles of MST (Cont.)

7. Continuous Effort

   Interventions should be designed to require daily or weekly effort by family members.

8. Evaluation and Accountability

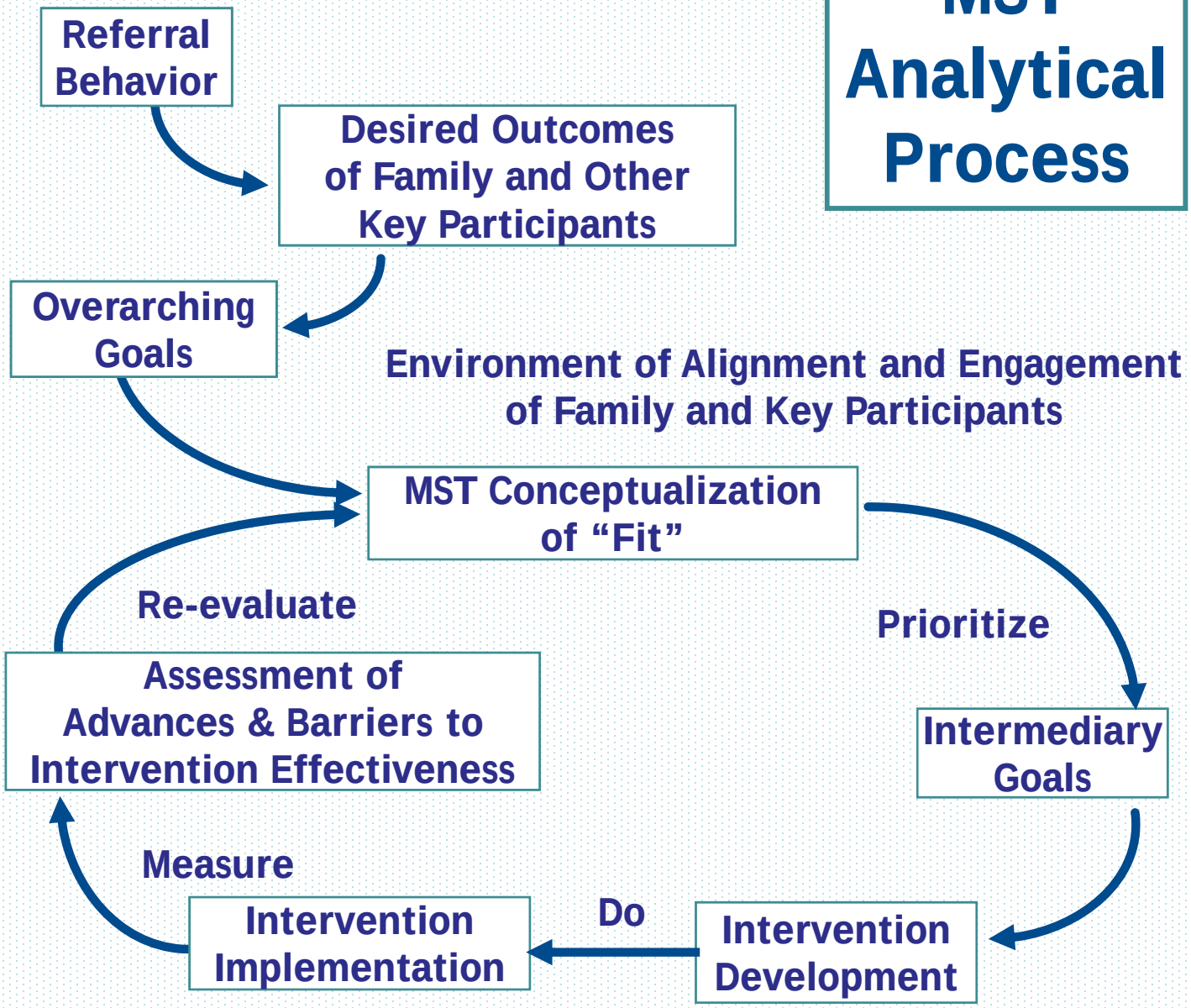
   Intervention efficacy is evaluated continuously from multiple perspectives, with providers assuming accountability for overcoming barriers to successful outcomes.

Principles of MST (Cont.)

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 Analytical Process



MST's Research Heritage

MST Multisystemic Therapy

Key Points:

- 30+ years of Science
- Consistent Outcomes
- Transportability Study Findings
- Role of Model Adherence

MST: 30+ Years of Science

32 published outcome, transportability and benchmarking studies including 22 randomized trials

- 15 studies using standard MST with juvenile offenders
  - 7 independent studies
- 2 studies with substance-abusing or –dependent juvenile offenders (MST-Substance Abuse)
- 3 studies with juvenile sexual offenders(MST-Problem Sexual Behavior)
- 3 studies with youths presenting serious emotional disturbances(MST-Psychiatric)
- 2 studies with maltreating families (MST-Child Abuse and Neglect)
- 4 studies with adolescents with chronic health care conditions (MST-Health Care)
  - Diabetes and obesity
- 3 large-scale transportability (implementation) studies

* Complete list of MST outcome studies: www.mstservices.com/outcomestudies.pdf

Consistent Outcomes

MST® Multisystemic Therapy

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

Long-term Outcomes

14-year and 22-year post-treatment outcomes

(MST compared to Individual Treatment: individuals treated 1983-1986)

14 years post treatment

(n= 165, 94% tracking success)

- 54% fewer arrests
- 59% fewer violent arrests
- 64% fewer drug-related arrests
- 57%fewer days in adult confinement
- 43% fewer days on adult probation

22 years post treatment

(n= 148, 84% tracking success)

- 36% fewer felony arrests
- 75% fewer violent felony arrests
- 33% fewer days in adult confinement
- 38% fewer issues with family instability (divorce, paternity, child support suits)
- 3% fewer financial problems (credit, contract, rent suits)

MST Ultimate Outcomes
2014 MSTI Data Report

AT HOME	89%
IN SCHOOL/ WORKING	84%
NO ARRESTS	85%

These results are based on a comprehensive review of the 12,127 cases (85.9% of 14,123 cases referred for treatment in 2013) that were closed for clinical reasons (i.e., completed treatment, low engagement, or placed).

The Missouri Delinquency Project

Charles M. Borduin, (PI), University of Missouri
Barton J. Mann, University of Illinois - Chicago
Lynn T. Cone, University of Missouri
Scott W. Henggeler, Medical University of South Carolina
Bethany R. Fucci, University of Missouri
David M. Blaske, University of Missouri
Robert A. Williams, University of Missouri

Participants:
200 Offenders and Their Families

- Averaged 4.2 previous arrests
- 64% had been incarcerated previously for at least 4 weeks
- Average age = 14.8 years
- 67% male, 33% female
- 30% African-American, 70% Caucasian
- 47% lived with only one parental figure

Service/Treatment Options

- Multisystemic Therapy
  - 77 completers
  - 15 dropouts
- Individual Therapy
  - 63 completers
  - 21 dropouts
- Usual probation services for refusers
  - 24 refusers

Instrumental Outcomes at Post-treatment

Multisystemic Therapy was significantly more effective at:

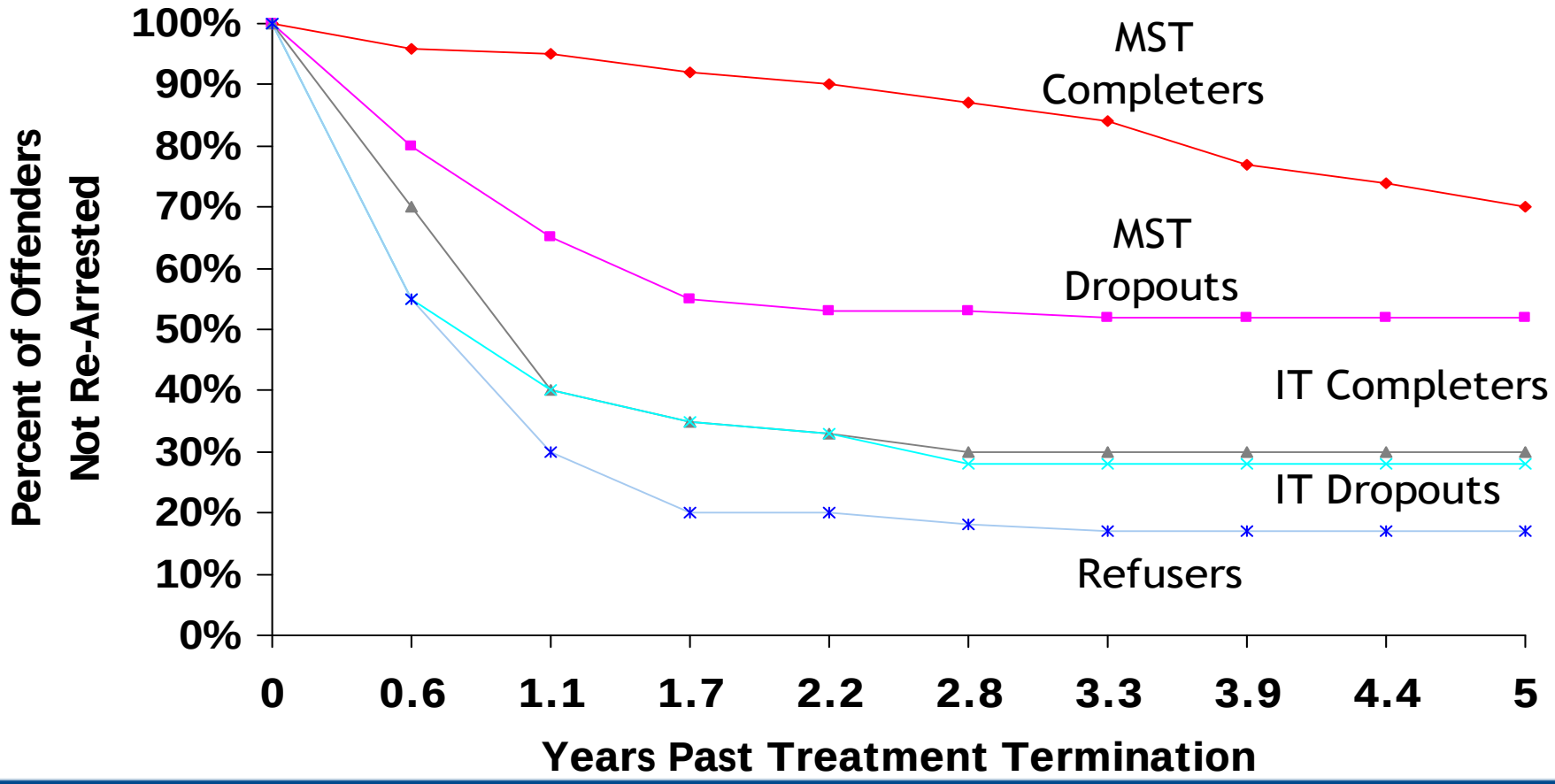
- Increasing family cohesion and adaptability
- Increasing family supportiveness
- Decreasing family hostility
- Decreasing parental symptomatology
- Decreasing behavior problems in youth

Ultimate Outcomes at Five-Year Follow-Up

Multisystemic Therapy was significantly more effective at:

- Preventing violent offending
- Preventing other criminal offending
- Preventing drug-related offending
- Decreasing seriousness of committed crimes

Missouri Delinquency Project



The Missouri Delinquency Project
Long-term (14 year) follow-up Study

Schaeffer, C.M., and Borduin, C.M. (2005)

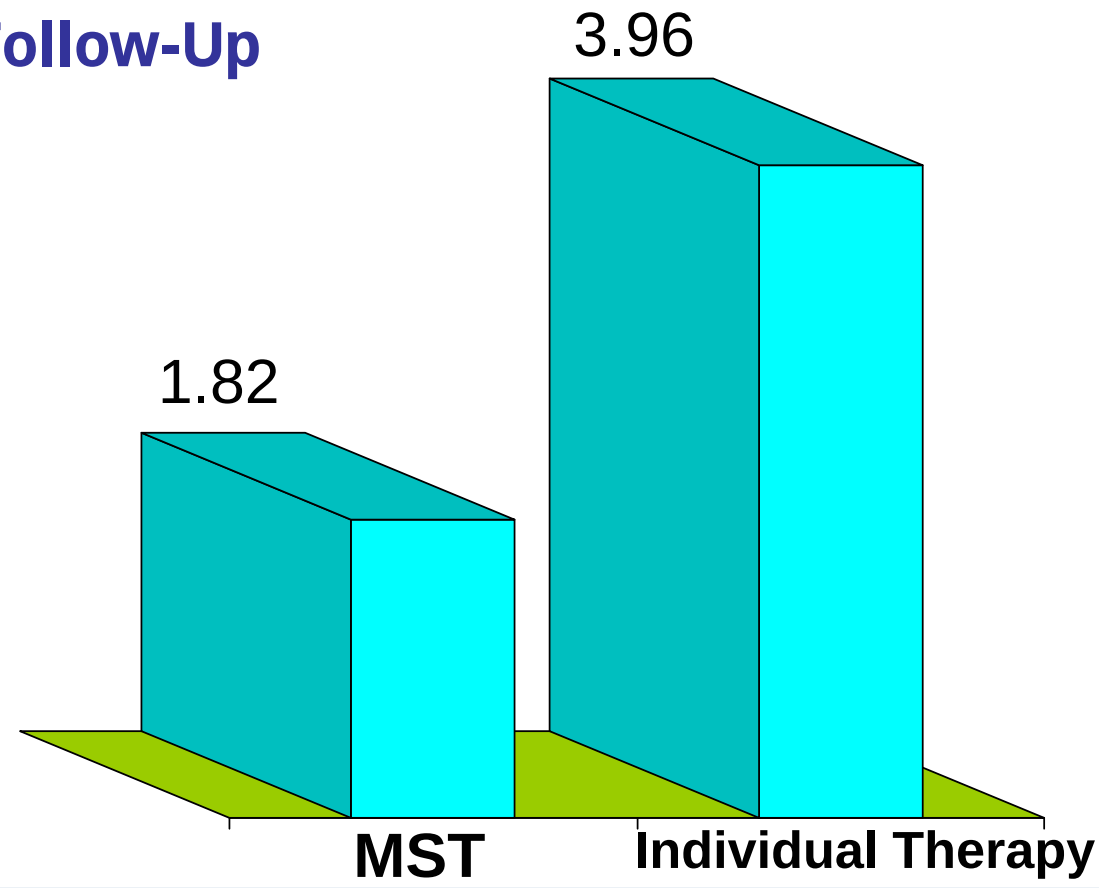
14-Year Follow-Up Sample

- Attempted to locate all participants (N = 176) who were randomly assigned to MST or individual therapy in Borduin et al. (1995) clinical trial
- Successfully located 165 (94%) of the original participants
- Average age at follow-up: 28.8 years (range = 24 to 32 years)
- Outcomes examined: criminal recidivism, days incarcerated and on probation in adulthood

All Arrests

- **14-Year Follow-Up**

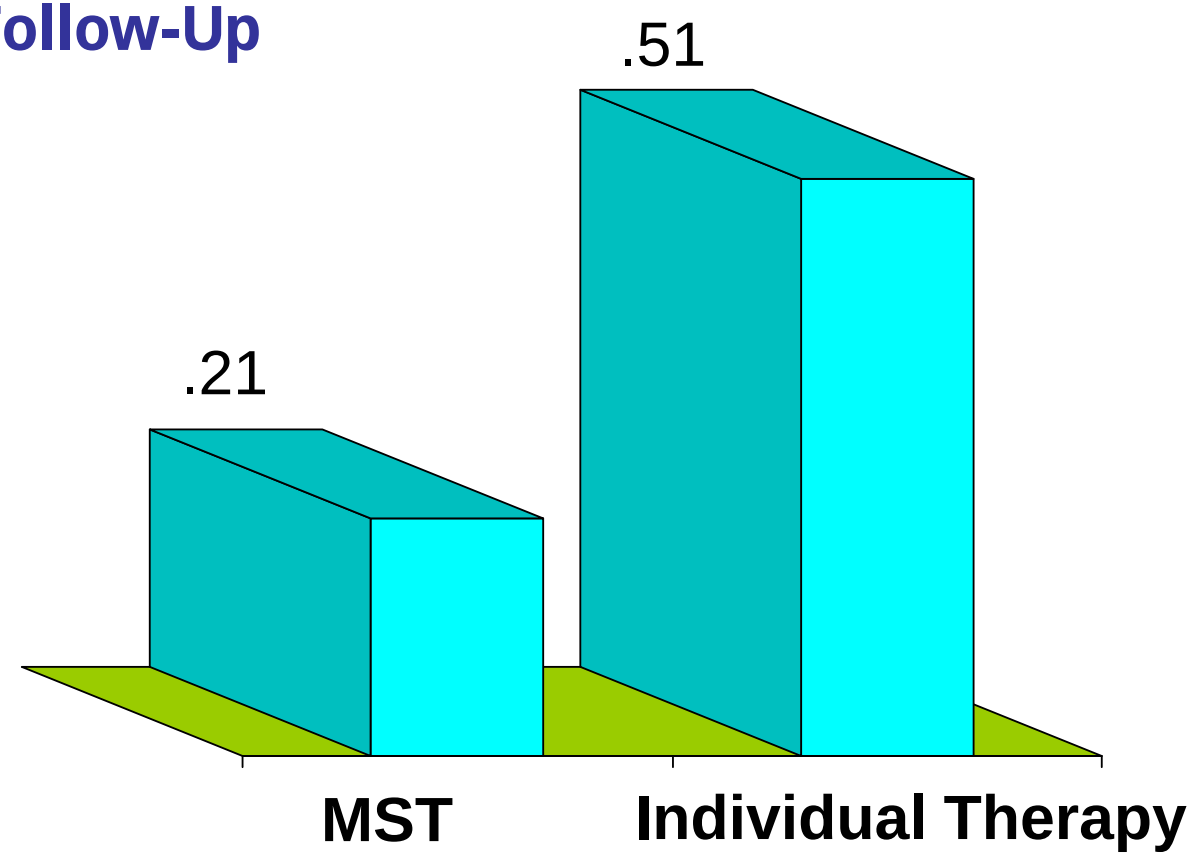
54% reduction



Violent Arrests

- **14-Year Follow-Up**

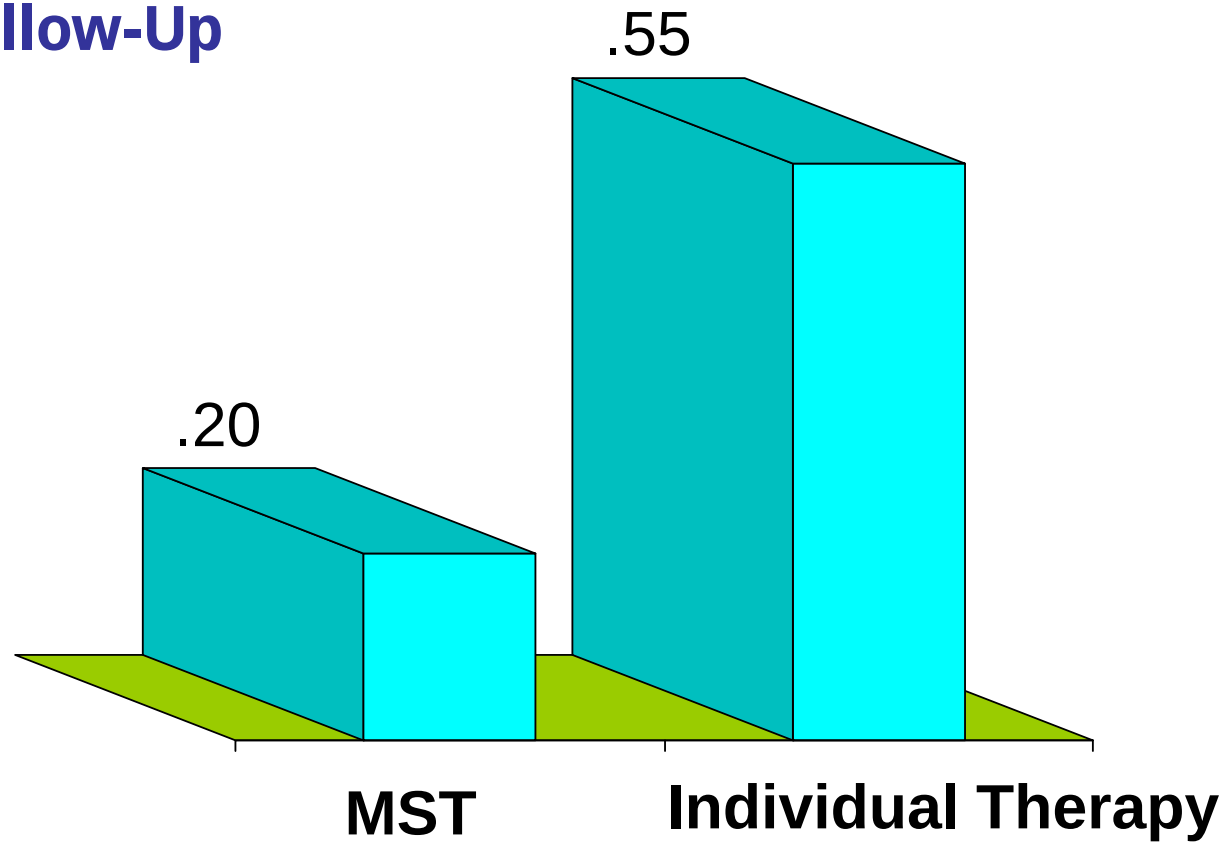
59% reduction



Drug-Related Arrests

- **14-Year Follow-Up**

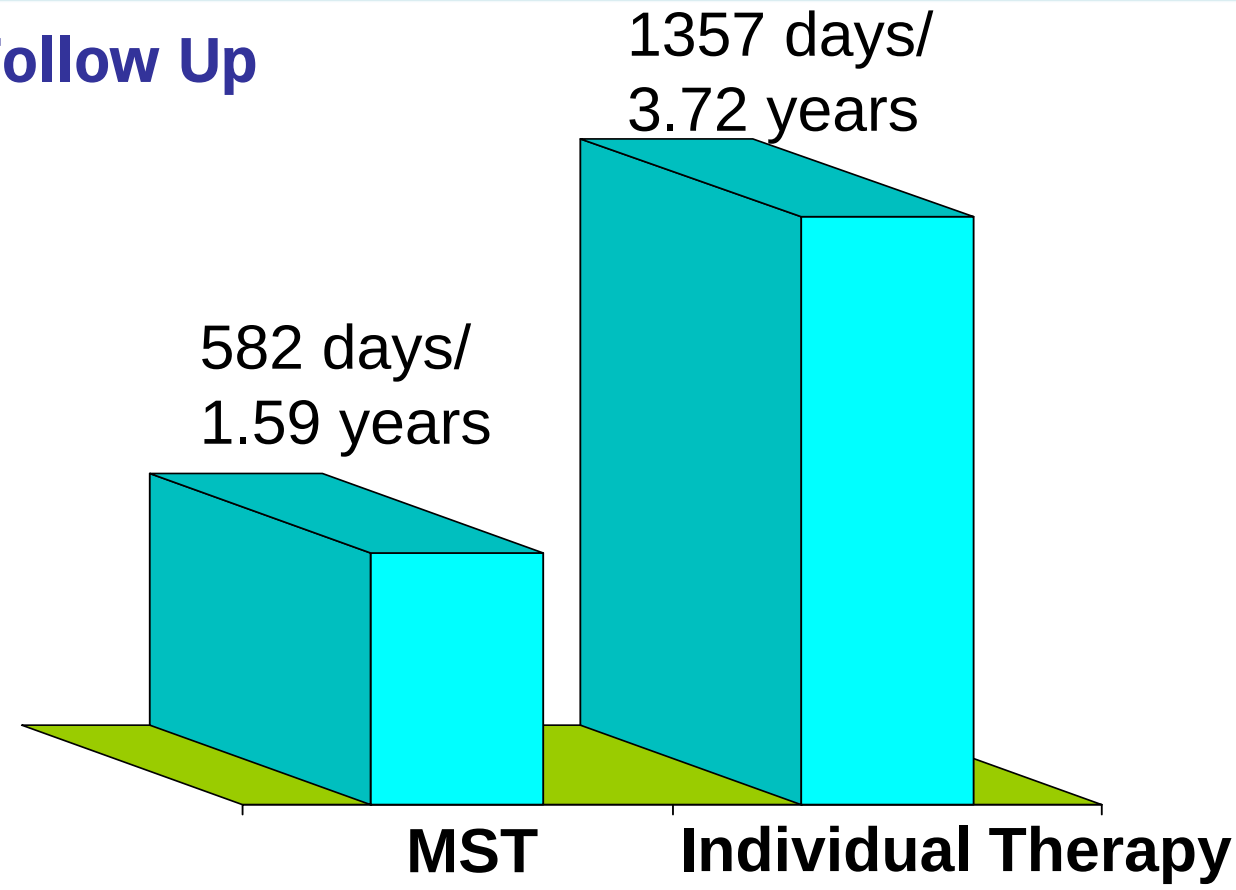
64% reduction



Adult Days Confined

- **14-Year Follow Up**

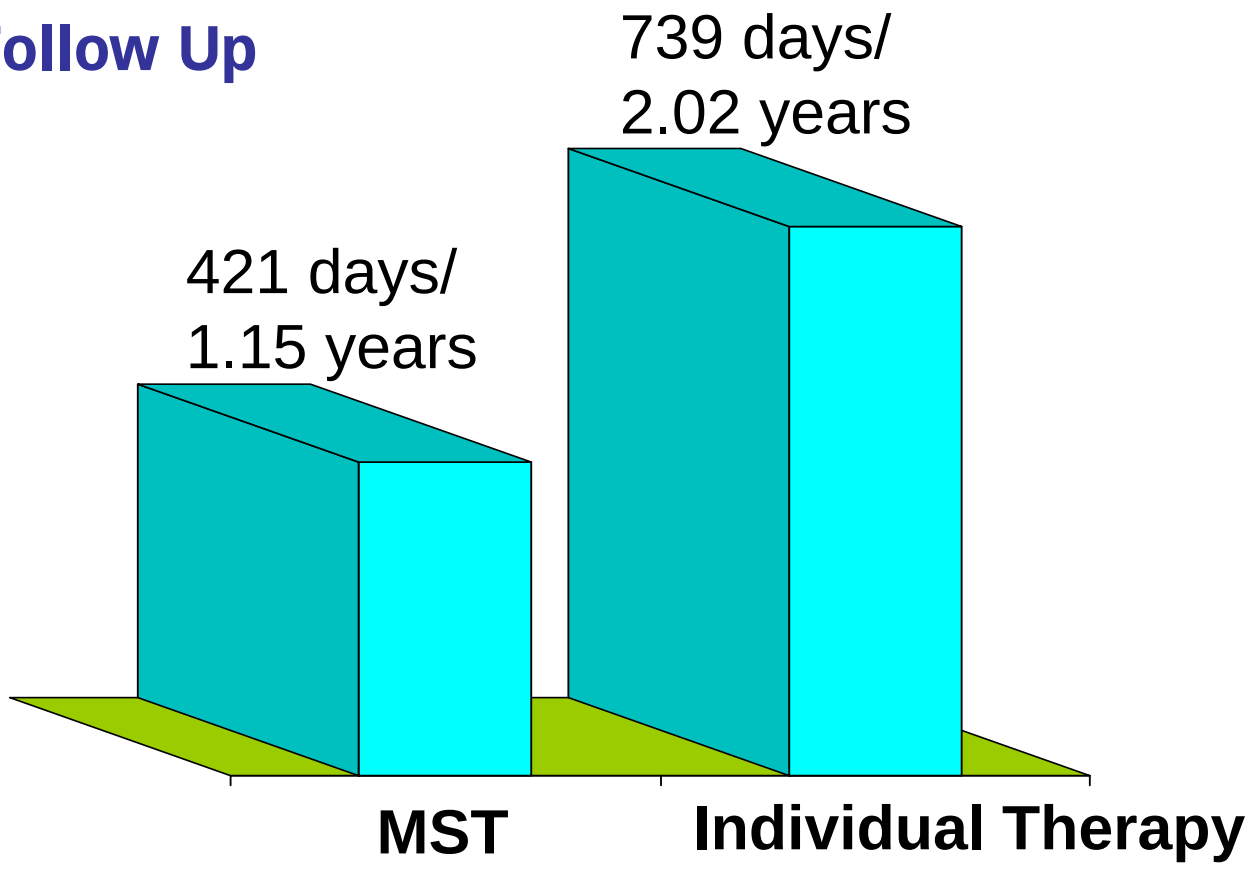
57% reduction



Adult Days on Probation

- **14-Year Follow Up**

43% reduction



The Missouri Delinquency Project
Long-term (22 year) follow-up Study

Sawyer, A. M., & Borduin, C. M. (2011)

Unique Aspects of 22-Year Follow-Up

- Longest follow-up of an evidence-based treatment ever conducted
- One of the longest follow-ups of any randomized trial ever conducted
- Examined civil court outcomes as well as criminal outcomes

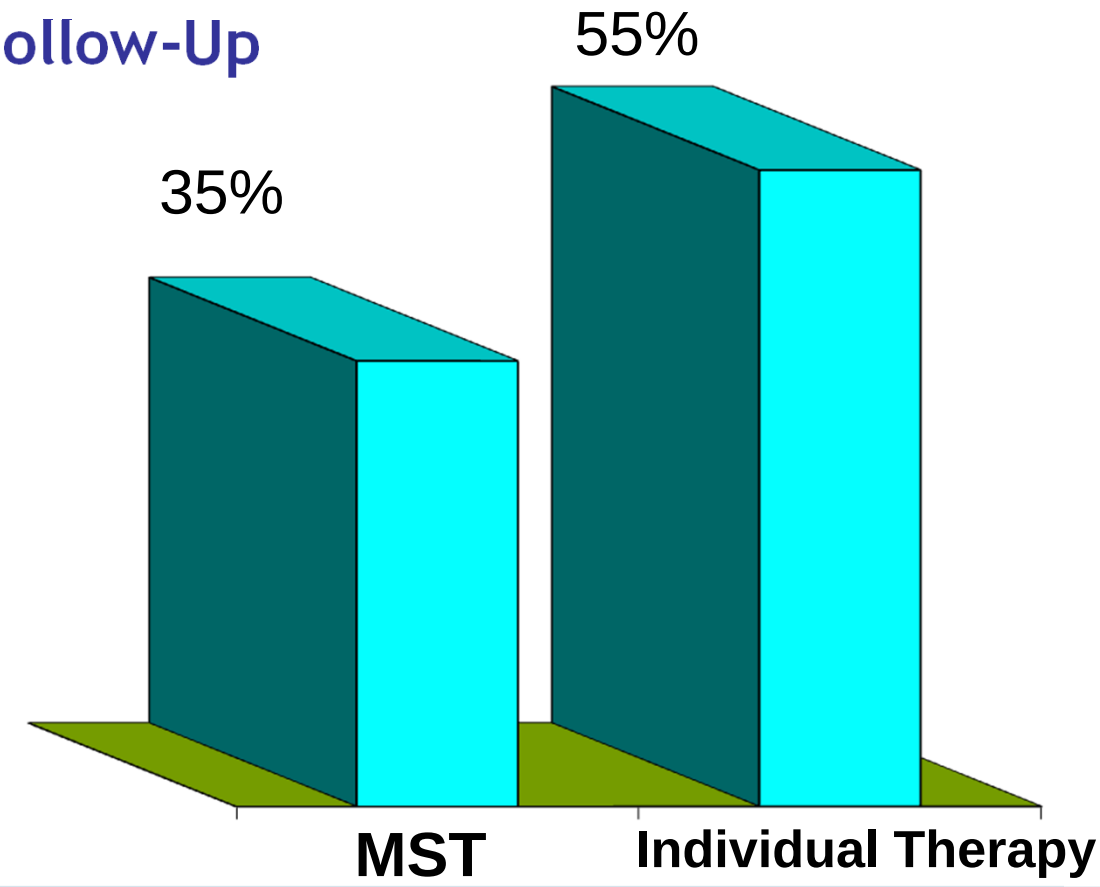
22-Year Follow-Up Sample

- Attempted to locate all participants (N = 176) who were randomly assigned to MST or individual therapy in Borduin et al. (1995) clinical trial
- Located 148 (84%) of the original participants
- Average age at follow-up: 37.7 years (range = ?)
- Criminal outcomes: convictions for felony, misdemeanor, violent, and nonviolent crimes; incarceration
- Civil Court outcomes: divorce, paternity suits, child support suits, account/credit, contract, and rent suits

Any Felony Arrests

- **22-Year Follow-Up**

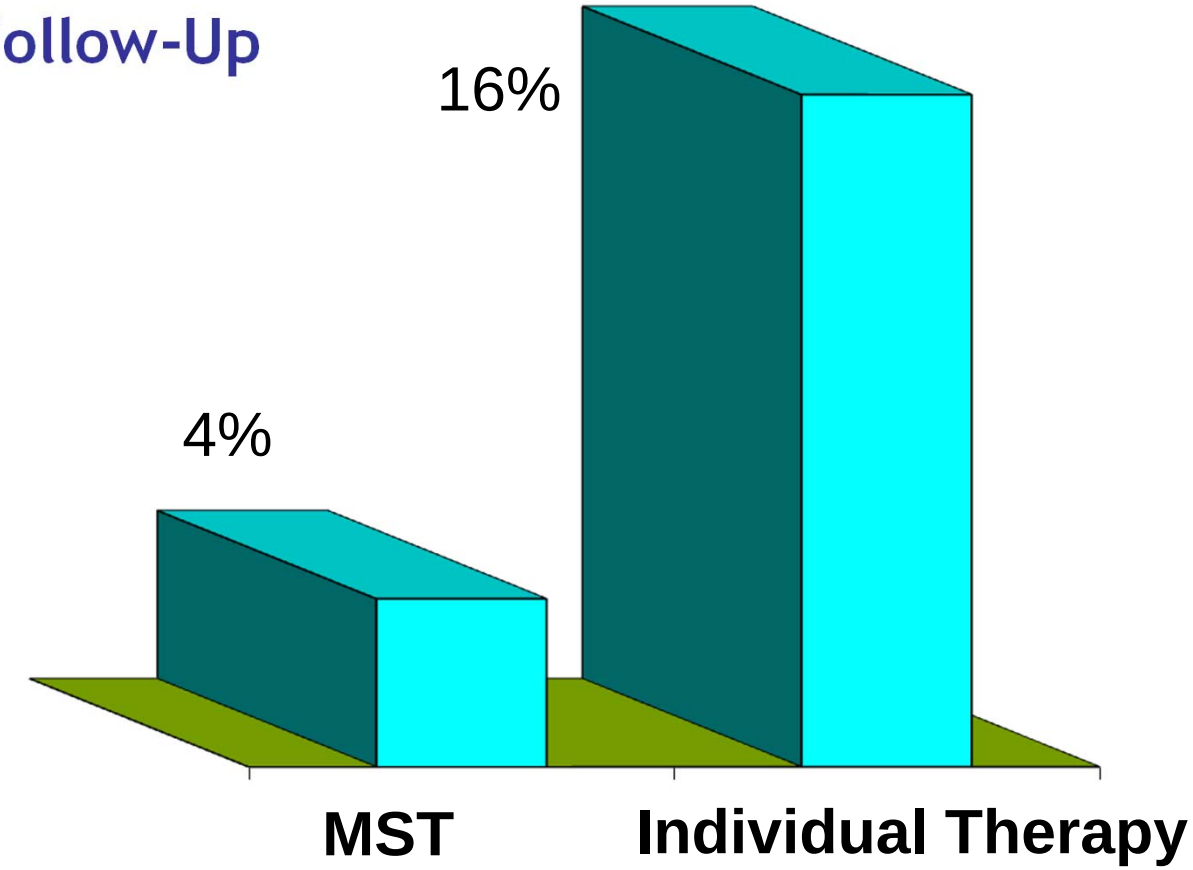
36% reduction



Violent Felony Arrests

- **22-Year Follow-Up**

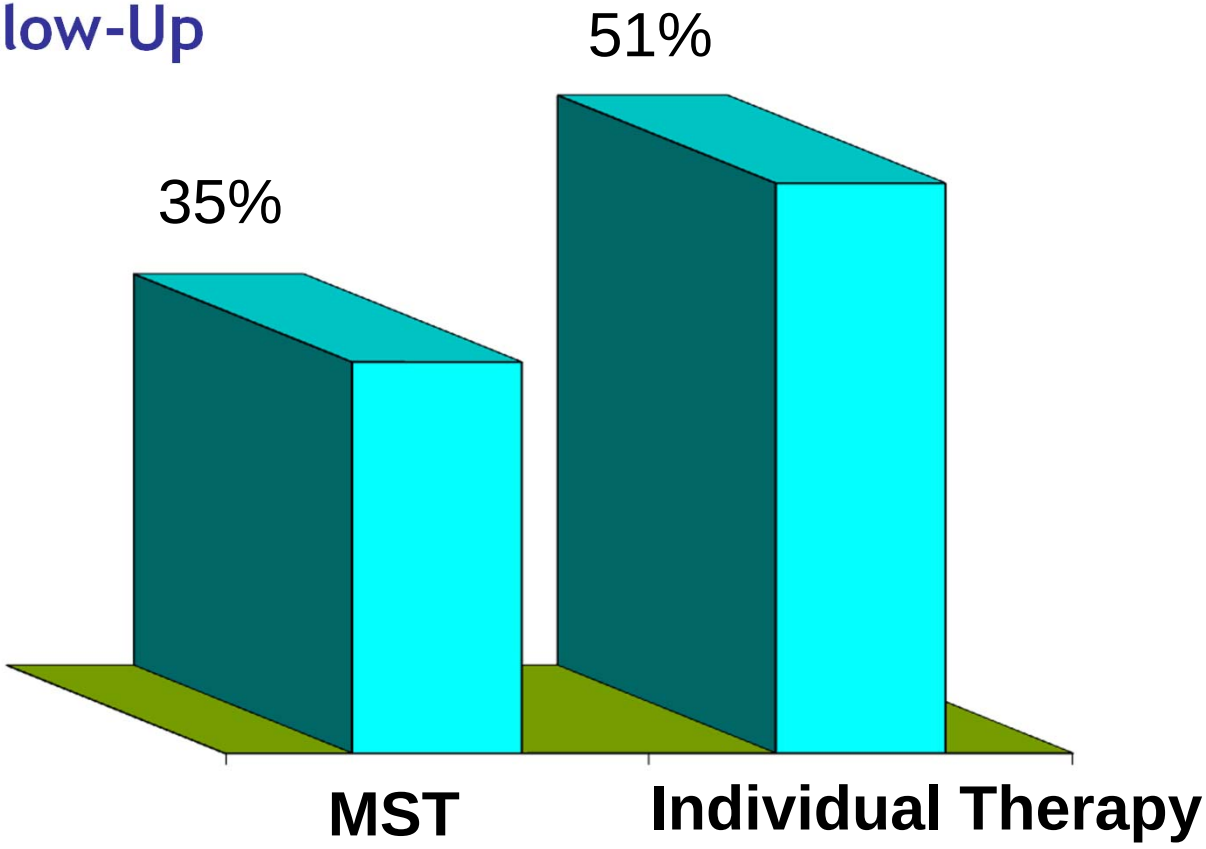
75% reduction



Nonviolent Felony Arrests

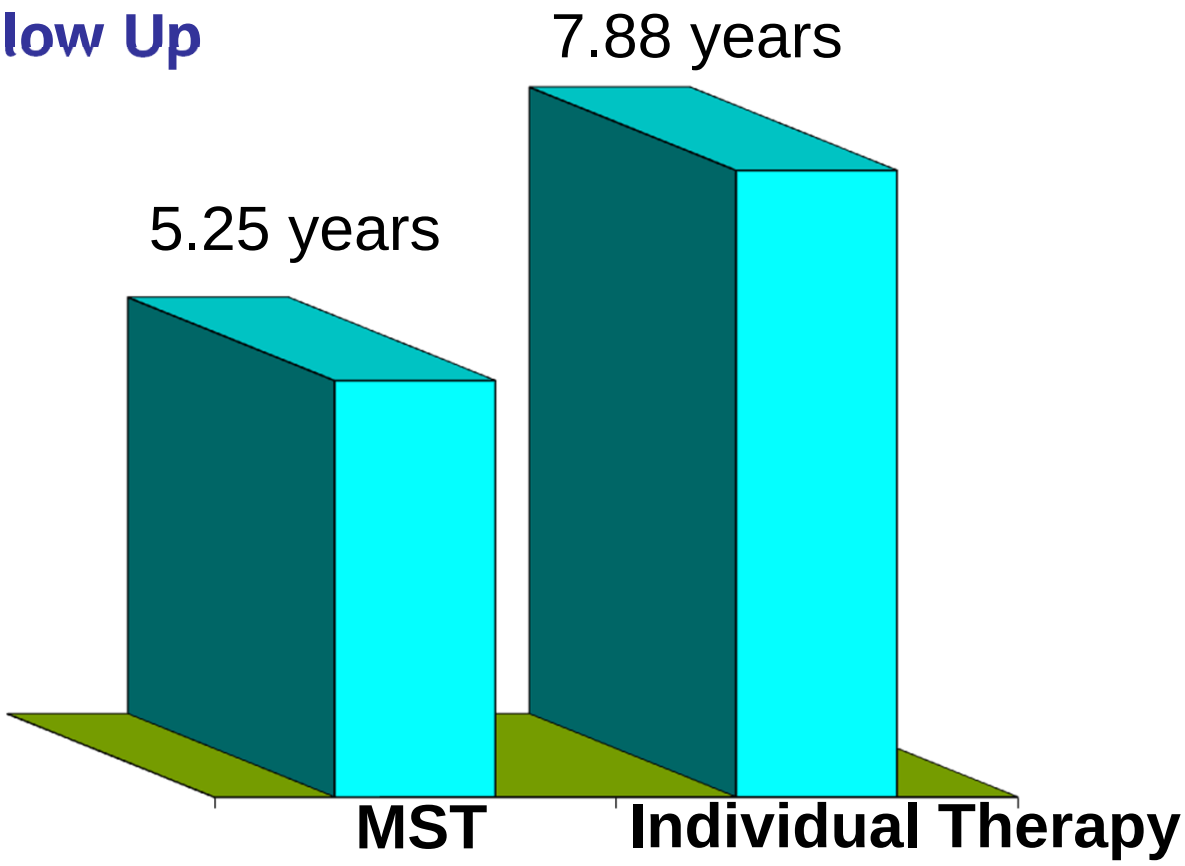
- **22-Year Follow-Up**

33% reduction



Incarceration Years

- **22 Year Follow Up**

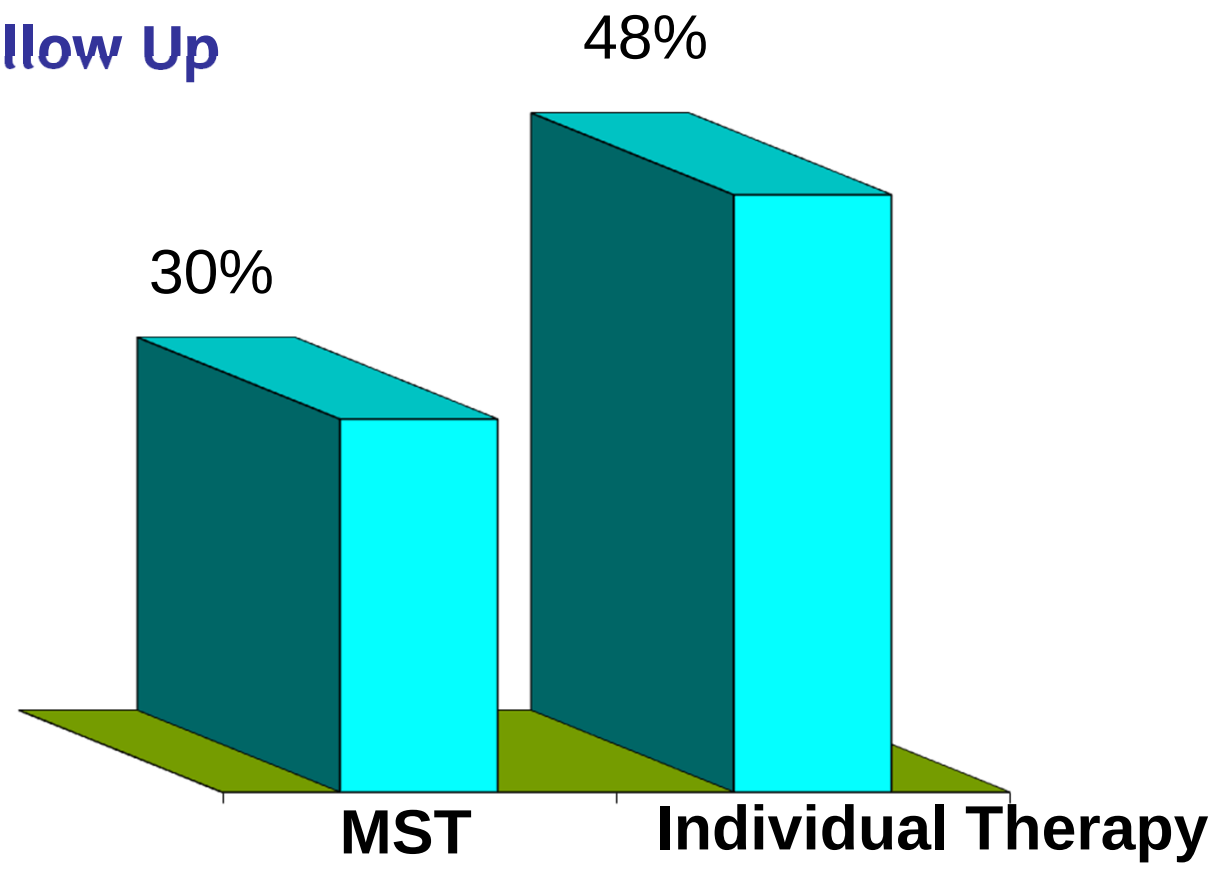


33% reduction

Family instability: divorce, paternity suits, child support suits

- **22-Year Follow Up**

38% reduction



Multisystemic Therapy For Serious Juvenile Offenders – The Simpsonville Study

Scott W. Henggeler

Gary B. Melton

Funded by NIMH

Simpsonville Study: 84 Serious Juvenile Offenders

- All at "imminent risk" of out-of-home placement
- 54% were violent offenders
  - manslaughter (2), assault and battery with intent to kill (3), aggravated assault (9)
- Averaged 3.5 previous criminal arrest
- Averaged 9.5 weeks of prior incarceration
- Average age was 15.2 years, 77% males
- 56% African-American, 42% Caucasian

Simpsonville Study: Project Goals

- Reduce rates of criminal activity
- Reduce cost of services
- Reduce time in out-of-home placement
- Preserve family integrity

Needs of Violent and Chronic Juvenile Offenders and Their Families

MST® Multisystemic Therapy

- Improve parental discipline practices
- Increase family affection
- Decrease association with deviant peers
- Increase association with prosocial peers
- Improve school/vocational performance
- Engage in positive recreational activities
- Improve family-community relations
- Empower family to solve future difficulties

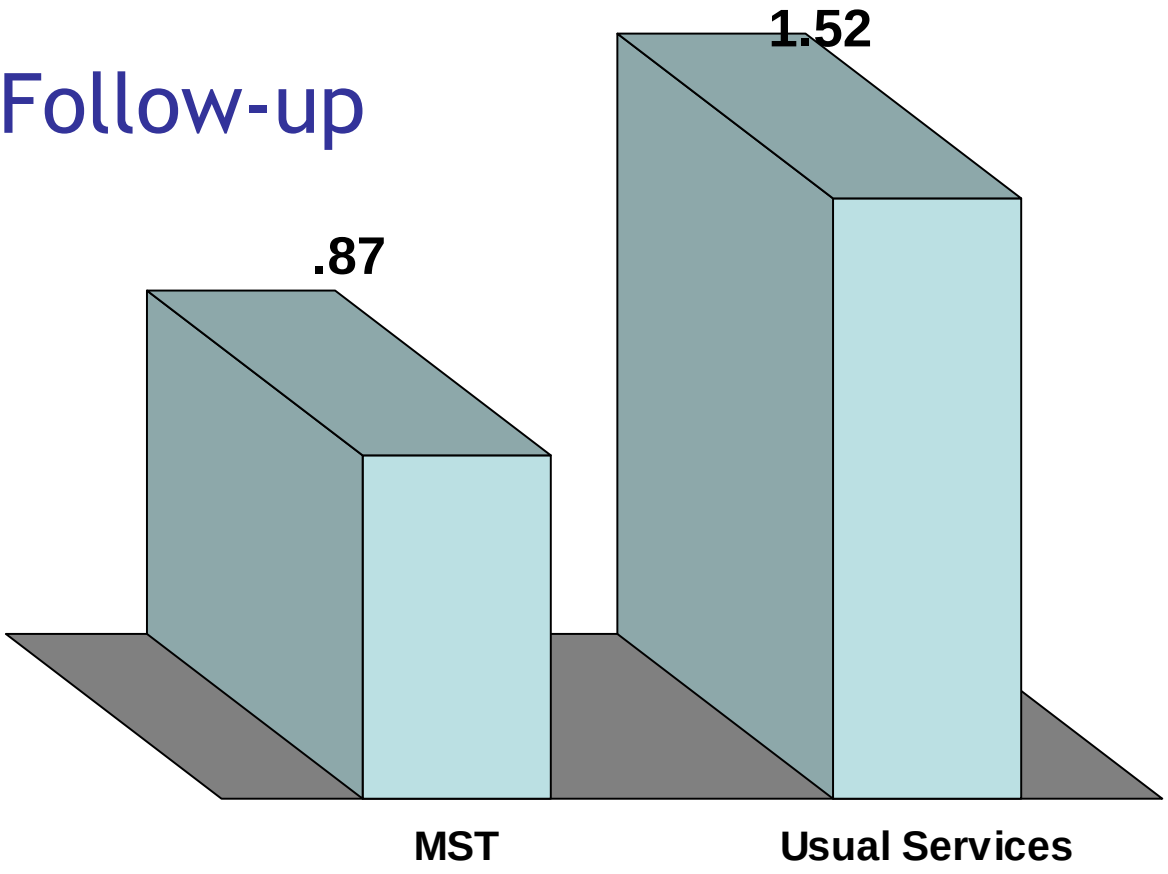
Simpsonville Study Results

- Multisystemic Therapy was more effective than usual services in meeting each goal

Simpsonville Study: Arrests

- 59 Week Follow-up

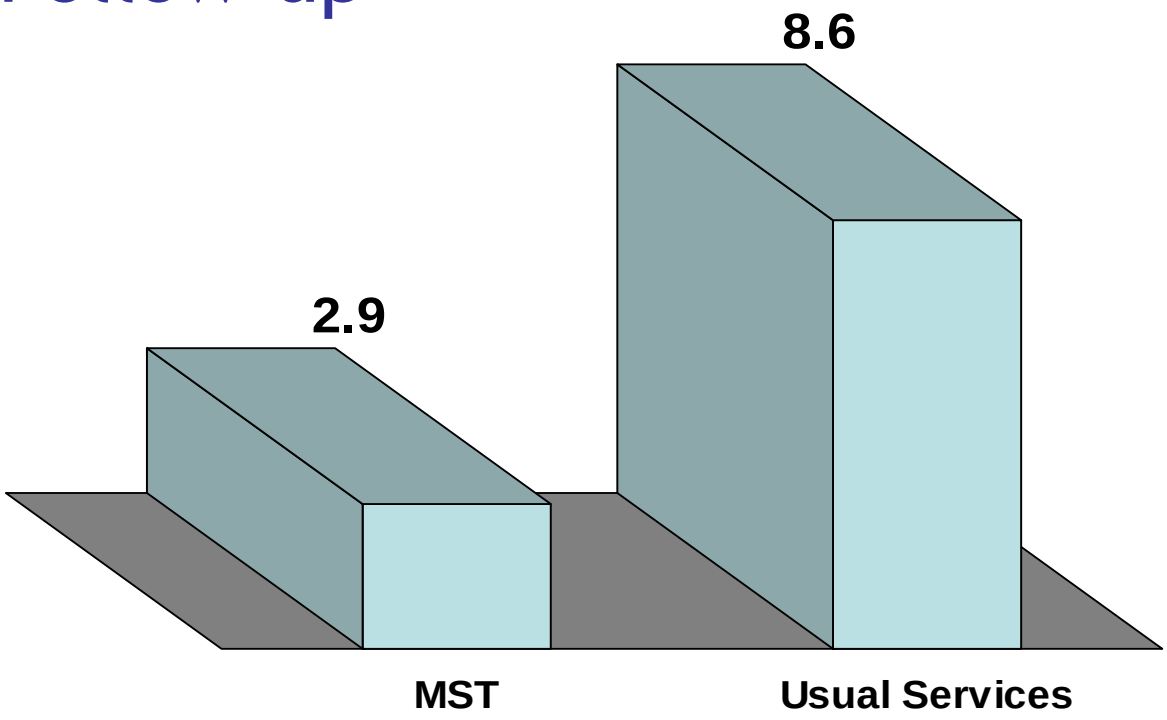
56% reduction



Simpsonville Study: Self-Reported Offenses

- 59 Week Follow-up

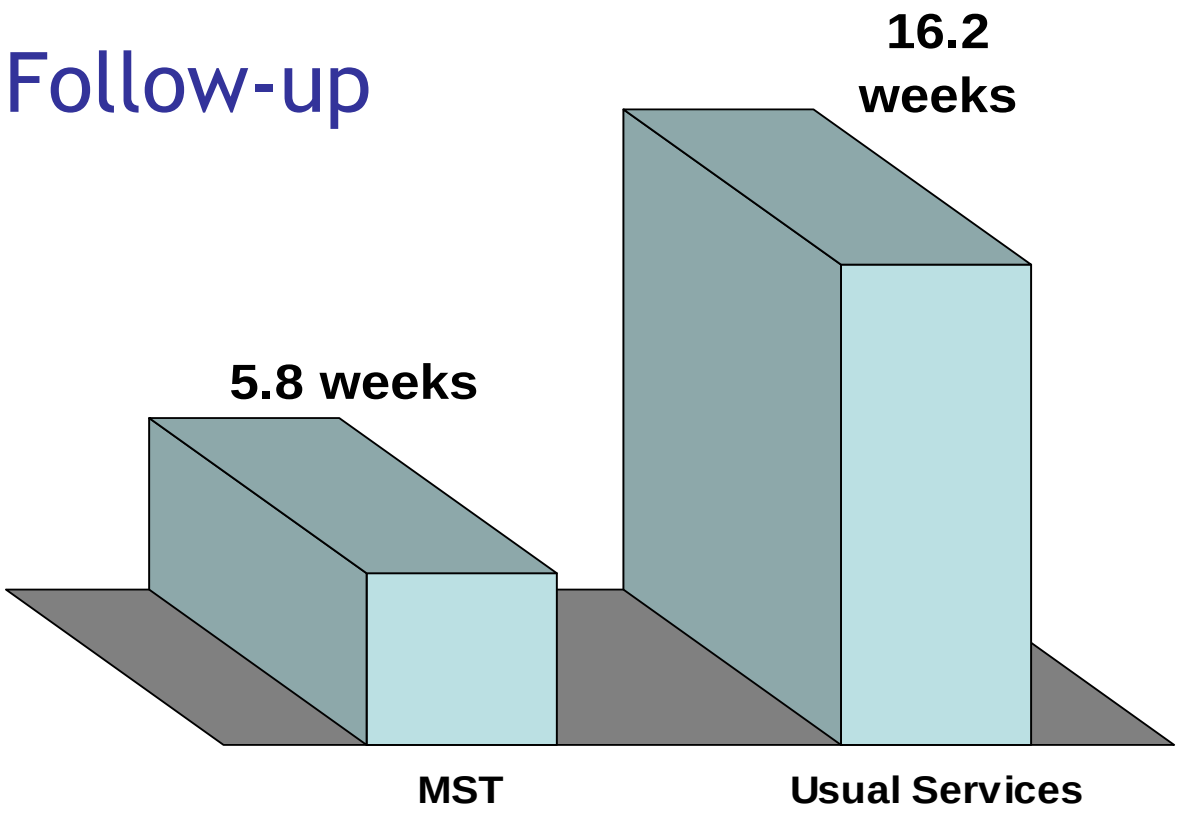
66% reduction



Simpsonville Study: Time in Out-of-Home Placements

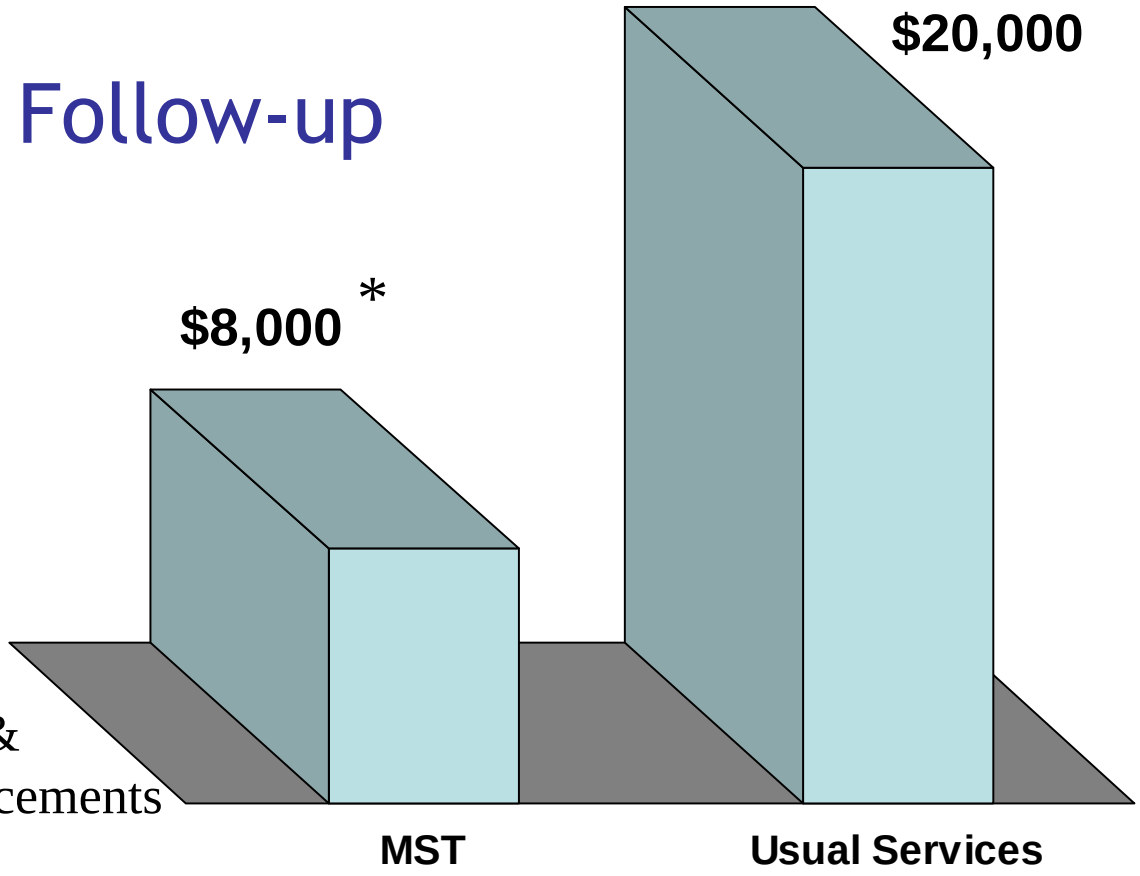
- 59 Week Follow-up

64% reduction



Simpsonville Study: Cost of Services (1992 dollars)

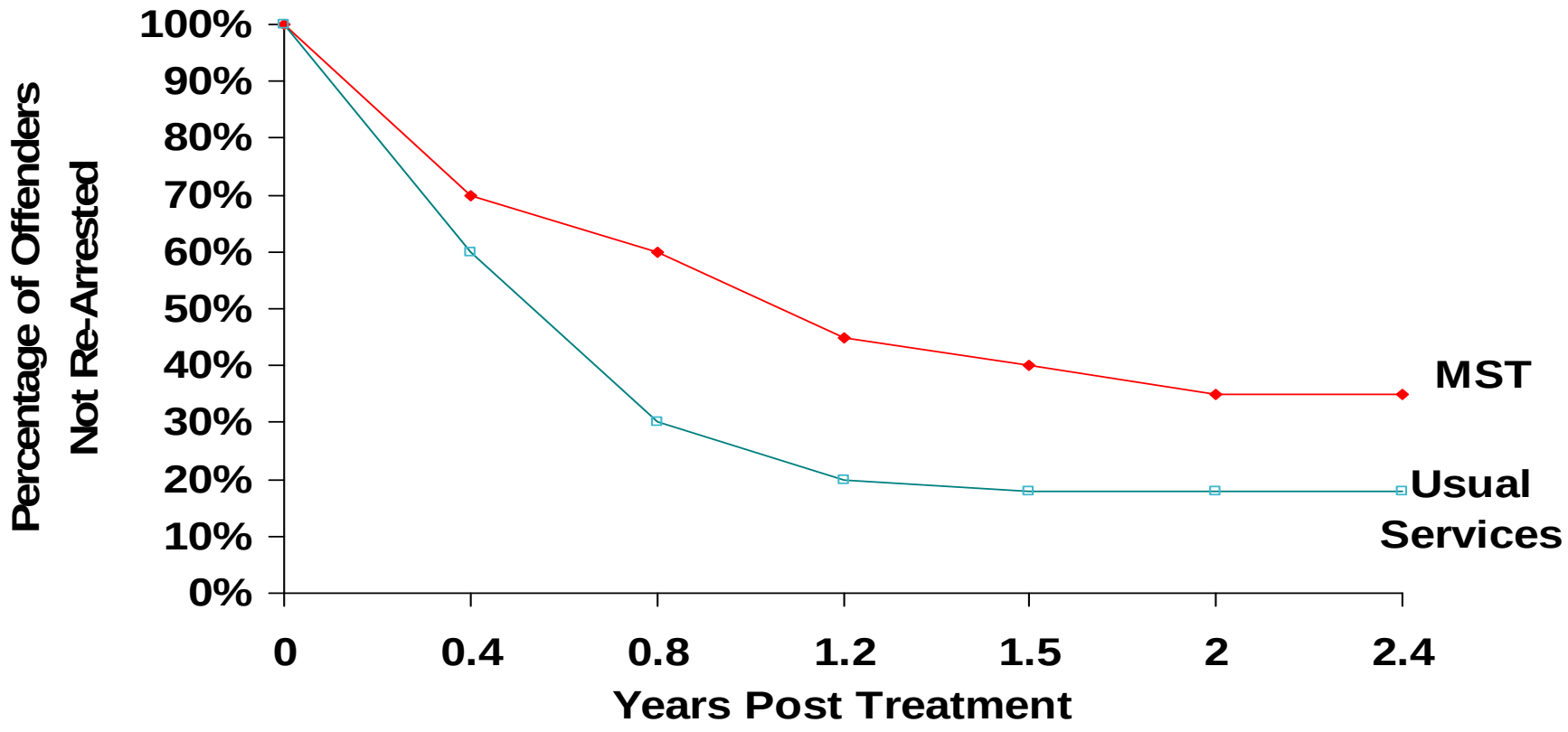
- 59 Week Follow-up



60% reduction

* $4,000 for MST & $4,000 for Placements

Simpsonville Study: 2.4 Year Follow-up



An Independent Effectiveness Trial of MST with Juvenile Justice Youth – The Ohio Replication Study

Jane Timmons-Mitchell
Monica B. Bender, Maureen A. Kishna and
Clare C. Mitchell

Funded by the Ohio Office of Criminal Justice Services

Ohio Independent Replication Trial

Independent effectiveness trial of 105 youth offenders:

- averaged age of 15 years
- averaged approximately seven prior offenses
- were predominantly male (78%) and white (78%)

Ohio Independent Replication Trial

Results for the MST group 2 years after completion:

- 23% less likely to be re-arrested (67% of the MST group had been re-arrested at least once, versus 87% of the control group).
- 39% fewer arrests and arraignments per youth over the two years (1.4 vs. 2.3)
- significant improved functioning for MST group in the home, at school and in the community.

Ohio Independent Replication Study Quality

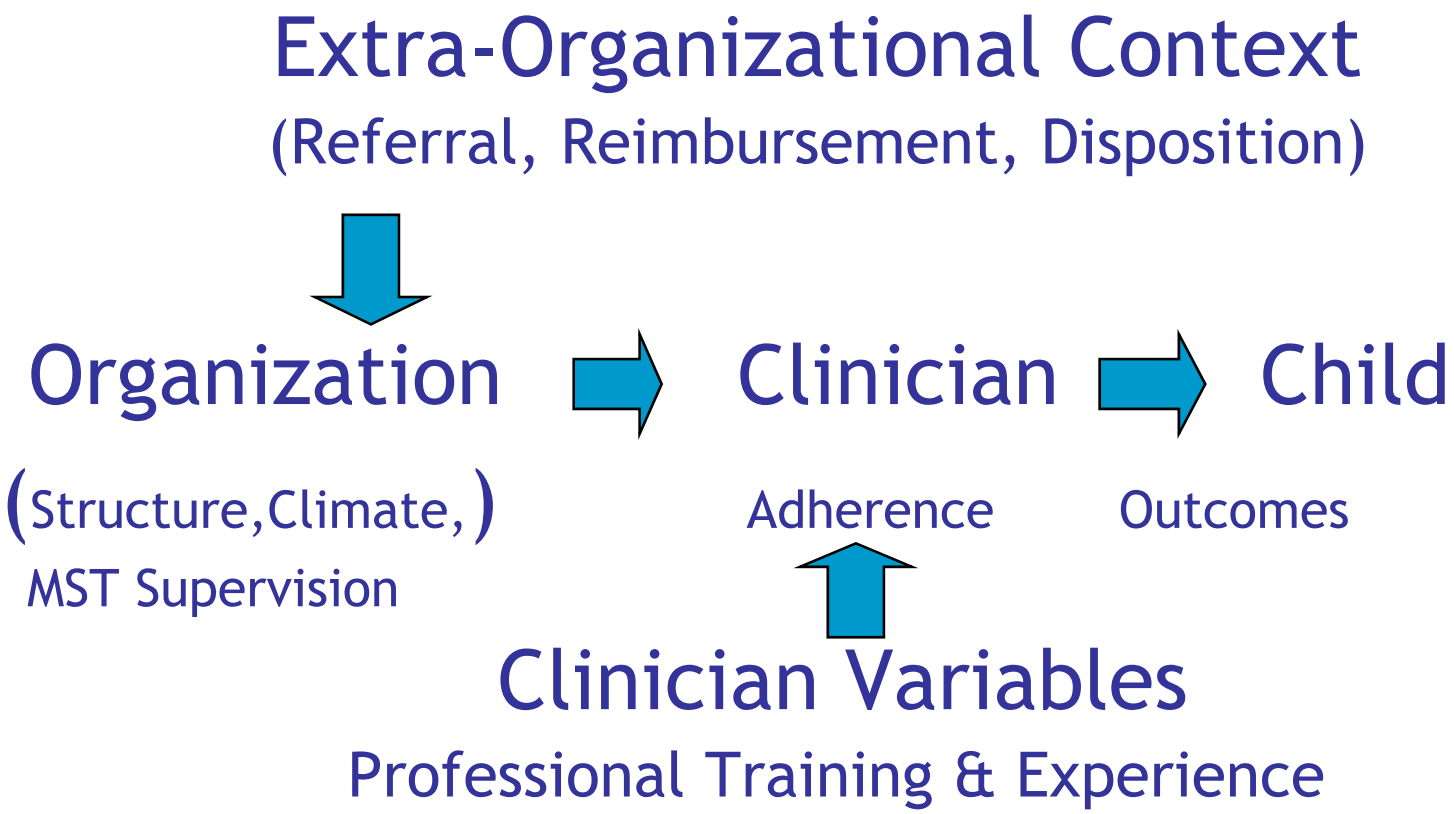
- High quality replication conducted by independent researchers (i.e. not the program's developers).
- Low attrition: At the 2-year follow-up, outcome data on arrest rates were collected for 89% of the original sample
- Conducted in a community mental health setting providing evidence of its real-world effectiveness
- Used official arrest data to measure criminal behavior

MST Transportability Study

Sonja K. Schoenwald

Funded by NIMH and NIDA

Social Ecological Model of Treatment Transportability



Transportability Study Participants

- 45 MST programs in 12 states and Canada
- 453 clinicians (therapists and supervisors)
- 1979 youths and their primary caregivers

Transportability Study Participants

- **45 MST programs in 12 states and Canada**
- **453 clinicians (therapists and supervisors)**
  - 64% women
  - 66% Caucasian; 11 % African American; 5% Asian or Pacific Islander, 2% Hispanic, 21% other and mixed race or ethnicity
  - Average age of 34.3 years (SD = 9.4; range = 23-66 years old)
  - Majority (54%) held Master's degree; 32% held Bachelor's degree
  - Most common degree fields: social work, psychology, counseling

Transportability Study Participants

- **1979 youths and their primary caregivers**
  - Youths were on average 14.6 years old (*SD* = 2.32), and (65.2%) were male
  - Racial/ethnic identification: 57.8% Caucasian; 18.6% African American; 5.8% Asian or Pacific Islander; 4.2% Hispanic, 13.1% Mixed and Other
  - Referred to MST by: Juvenile Justice (44.6%); Child Welfare (22.5%), Mental Health (17.5%); Education & Other (15.1%)
  - Top 3 referral reasons: Criminal offenses, status offenses, substance abuse.

MST Transportability Study Outcomes Summary

- 1-year post-treatment reductions in youth behavior problems and functioning
- Over 2-year post-treatment reductions in criminal activity

Transportability Research Findings on Adherence

Research-based adherence measures

- TAM (Therapist Adherence Measure)- youth criminal charges 36% lower for families with maximum adherence score (1) than for families with minimum adherence score (0)
- SAM (Supervisor Adherence Measure) – youth criminal charges 53% lower for families with maximum SAMSP score (1) than for families with minimum SAMSP score (0)
- CAM (Consultant Adherence Measure)- consultant/MST expert adherence predicts improved therapist adherence and improved youth outcomes short term

Overall Summary of Research: The Role of Model Adherence

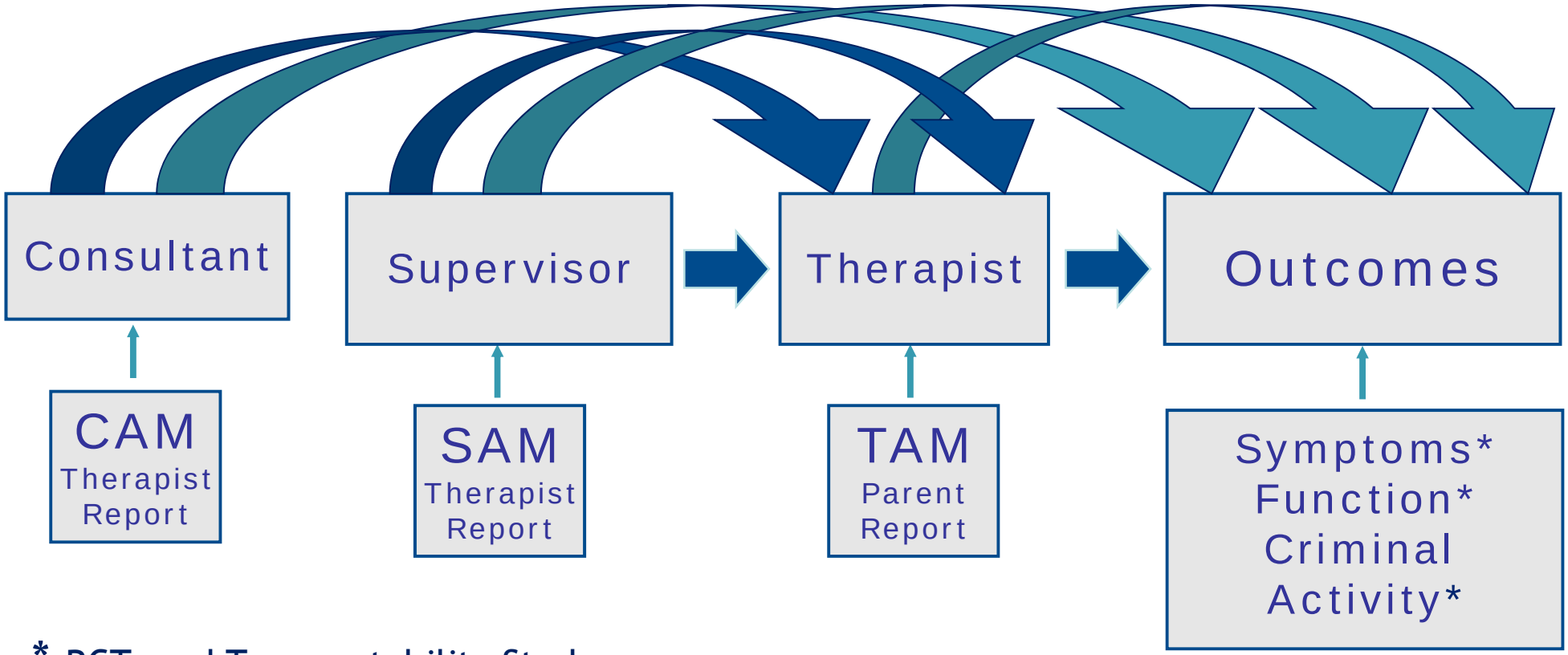
MST Multisystemic Therapy

MST treatment model adherence predicts*

- Decreased criminal activity
- Decreased arrest rates
- Decreased rates of incarceration

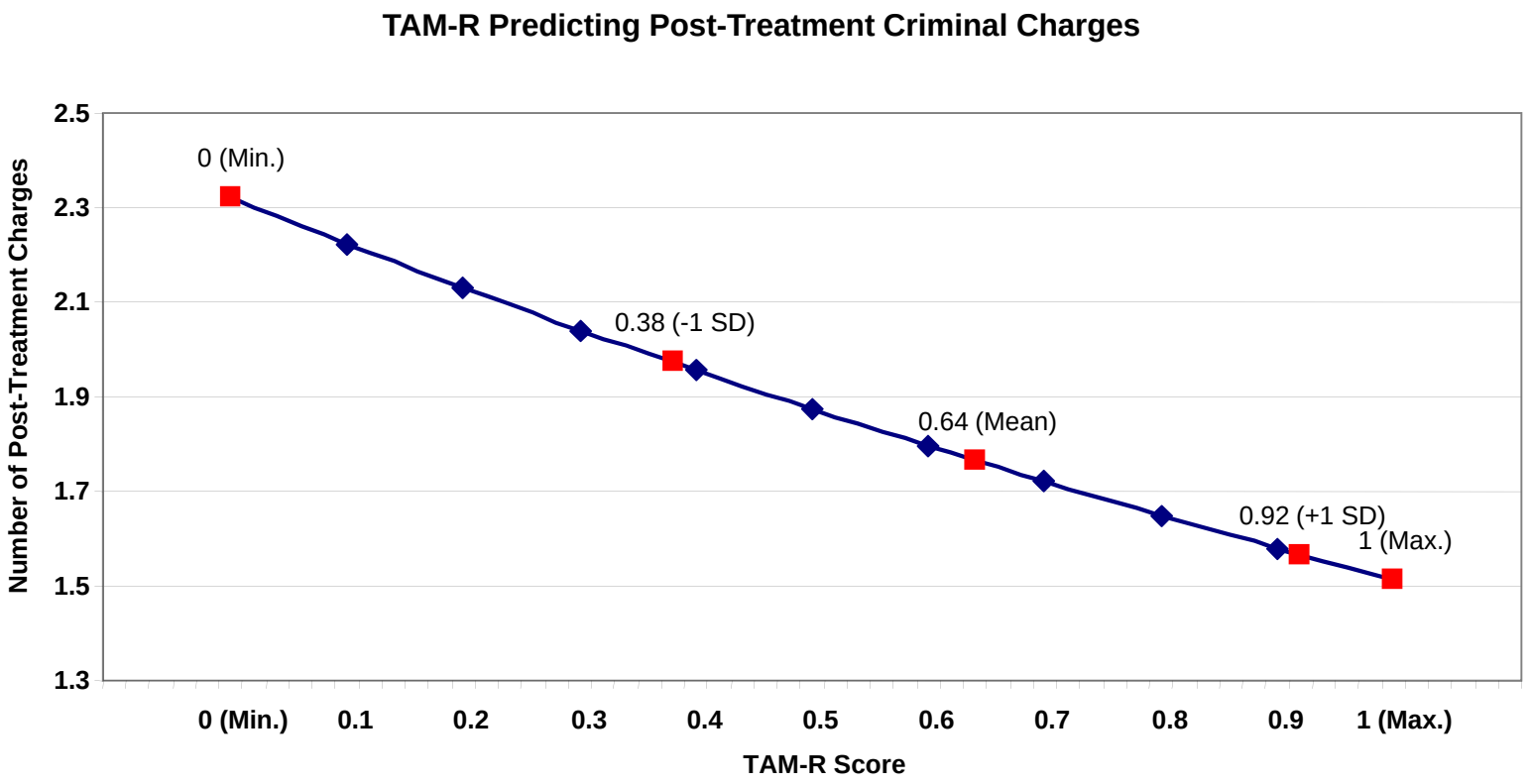
*Collective findings across multiple MST studies

Empirically – Tested Fidelity Links



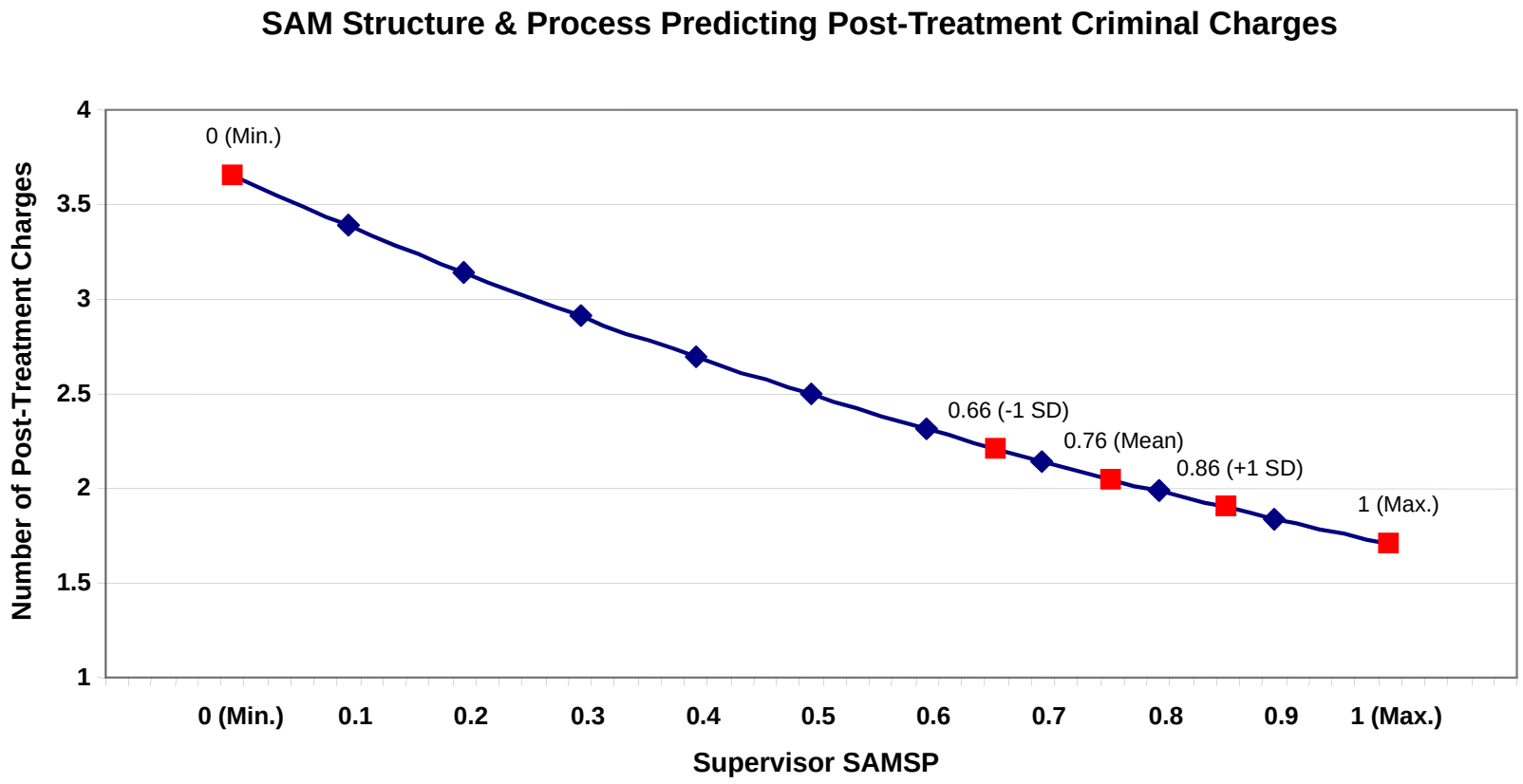
* RCTs and Transportability Study

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



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

MST® Multisystemic Therapy



Organization – Outcomes Links

- Select organizational structure and climate factors predicted discharge success and 6-month reductions in youth behavior problems in the MST Transportability study
  (Schoenwald et al, 2003)

- Some relations were in unexpected directions, and moderated by adherence

Other Organizational Issues: Turnover

- Annual turnover rate less than half national rates for mental health workforce
- Rate varied considerably across provider organizations
- Turnover, at youth/family level, and at program level, predicts significantly worse outcomes for youths.

Turnover

Higher turnover predicted by:

- climate of intense emotional demand
- low salary

The Role of Treatment Fidelity

Implications of research:

- High adherence is essential for obtaining outcomes with difficult clinical populations
- Intensive training and supervisory protocols are necessary to obtain high adherence
- To obtain the best outcomes, MST programs must “institutionalize” the collection and monitoring of adherence and operational data

MST Substance Abuse Treatment Outcomes

An overview and summary of findings

MST Substance Abuse Treatment Outcomes

MST is cited by the following federal agencies as an evidence-based practice for adolescent substance abuse

- National Institute on Drug Abuse
- Center for Substance Abuse Treatment
- Center for Substance Abuse Prevention

Substance Use Outcomes in Early MST Studies

Two Randomized Trials with Serious Juvenile Offenders.

In comparison with youths in control groups, MST achieved greater:

- Simpsonville Study - Henggeler, Melton, & Smith (1992)
  - Pre-post reductions in self-reported alcohol and marijuana use
- Missouri Delinquency Project - Borduin et al. (1995)
  - Reductions in substance-related arrests at 4-year follow-up (4% for MST vs. 16% for individual therapy)
  - At 14-year follow-up 64% decrease in substance-related arrests - Schaeffer & Borduin (2005)

Substance Abusing Delinquents

MST® Multisystemic Therapy

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

- Engagement and Retention in Treatment
  - 98% (57 of 58 MST families) treatment completion (4 months)
- Substance Use
  - Greater post-treatment reductions for MST
- School Attendance
  - Significant increase in regular classrooms for MST

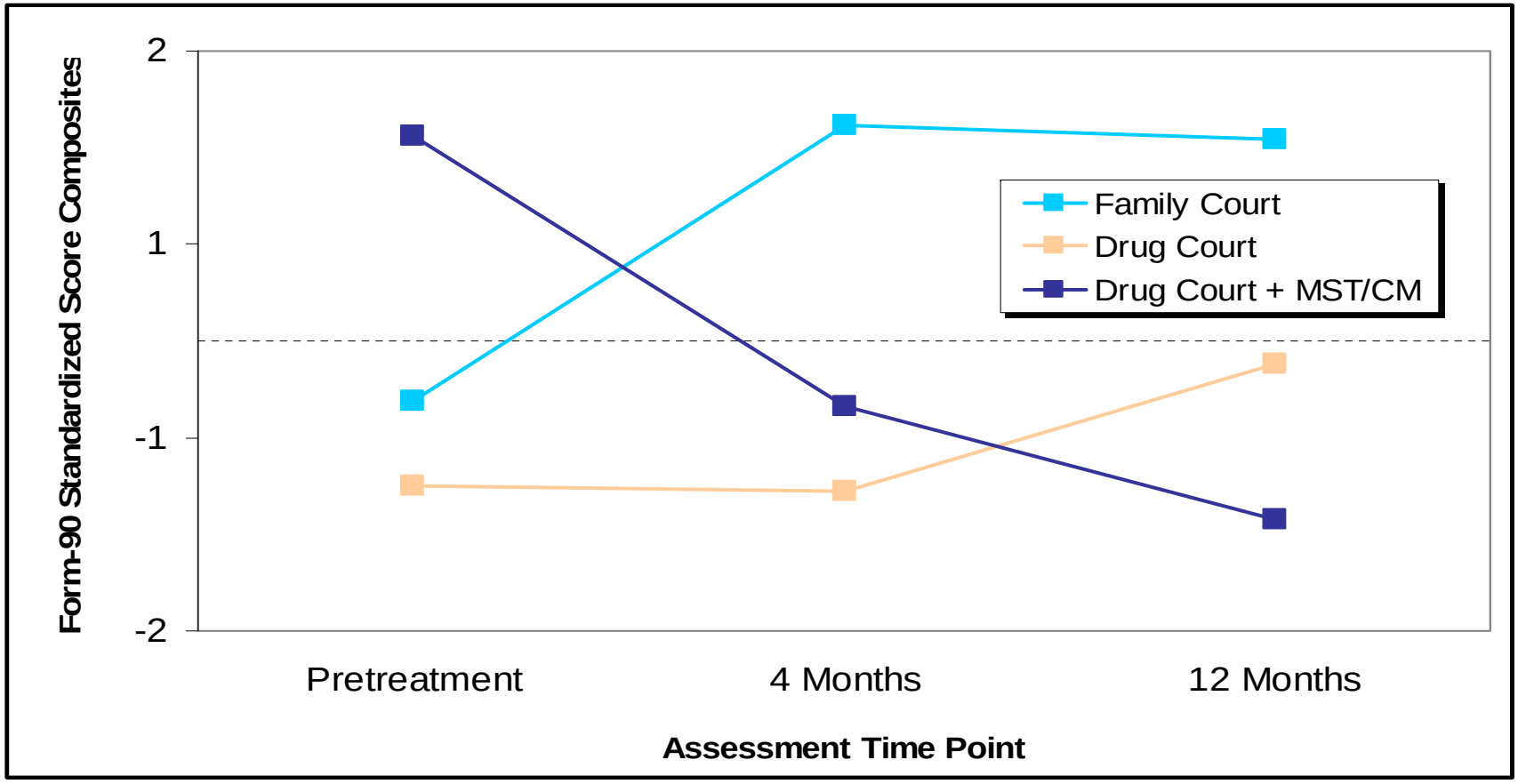
Substance Abusing Delinquents
(continued)

- Cost Savings
  - Incremental costs of MST offset by savings incurred from reductions in days of out-of-home placement at 12 months
- Favorable Treatment Effects at 4-Year Follow-Up
  - violent criminal behavior (.15 arrests/MST youth per year versus .57 arrests/youth in the control group)
  - higher rates of marijuana abstinence based on urine screens (55% abstinence for MST youth versus 28% in control group)

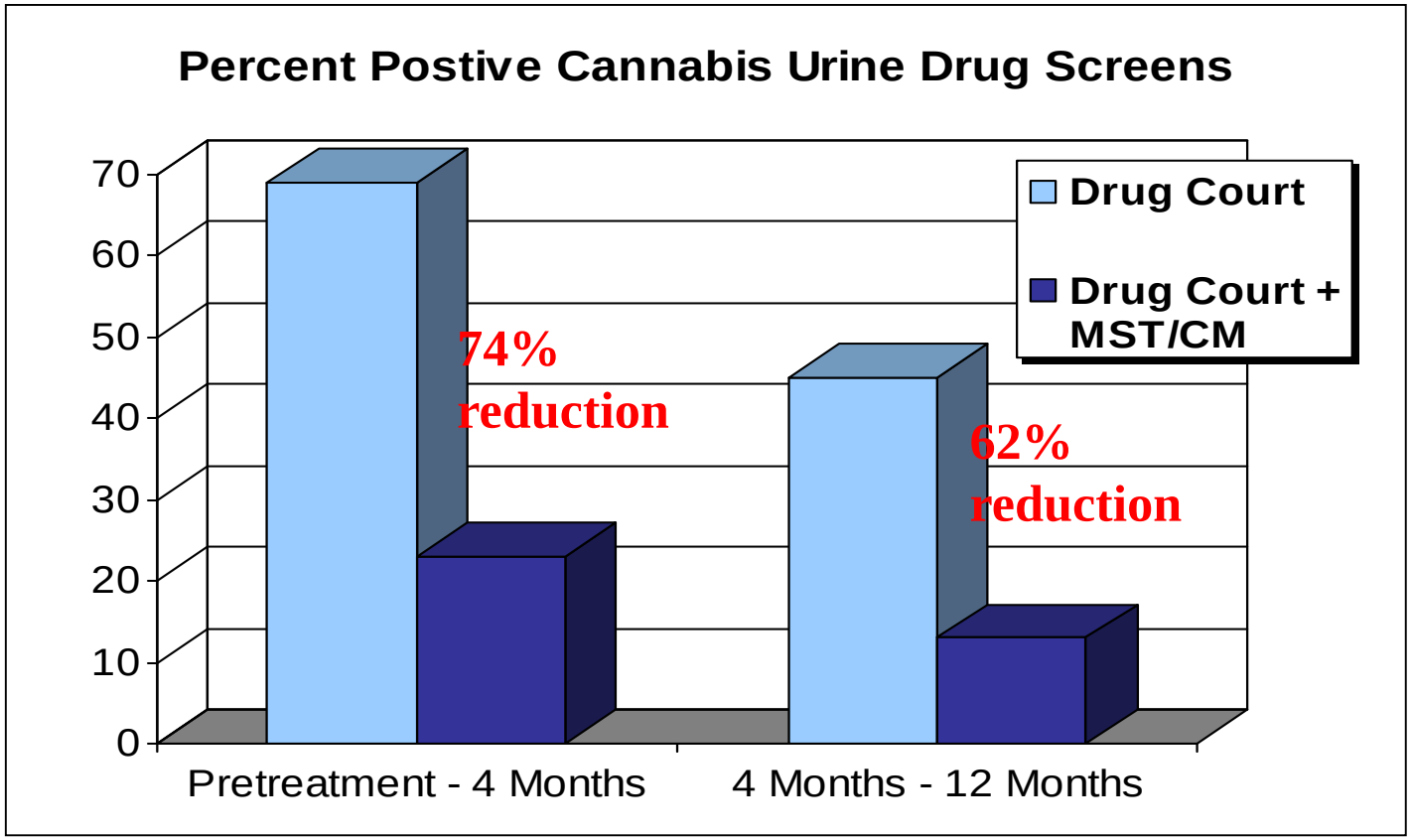
MST Juvenile Drug Court Study

- 161 juvenile offenders meeting DSM-IV criteria for substance abuse or dependence
- Randomized to:
  - Family court and treatment as usual (TAU)
  - Drug court and TAU
  - Drug court and MST
  - Drug court and MST with contingency management
- 12 month follow-up outcomes
- Sibling effects – decreased criminal activity for siblings of youths in MST

MST Juvenile Drug Court Study



MST Juvenile Drug Court Study



Why is MST Successful?

- Treatment targets known causes of delinquency: family relations, peer relations, school performance, community factors
- Treatment is family-driven and occurs in each youth's natural environment
- Significant energies are devoted to developing positive interagency relations
- MST personnel are well trained and supported
- Providers are accountable for outcomes
- Continuous quality improvement occurs at all levels