Multisystemic Therapy for Emerging Adults (MST--EA):
Treating Emerging Adult Offenders Who Have Mental Health Conditions

Maryann Davis
Ashli Sheidow
Michael McCart
Thank You!

- Funders:
  - National Institute of Mental Health (R34MH081374)
  - National Institute on Disability and Rehabilitation Research and the Substance Abuse and Mental Health Services Administration (H133B090018)

- Collaborators:
  - Sara Lourie & Anne McIntyre-Lahner, Connecticut Dept. of Children and Families
  - Charles Lidz, Edward Mulvey, Mary Evans, & Scott Henggeler
  - MST-EA/TAY Team - North American Family Institute
  - The emerging adult participants and their social network members
Arrest Rate in Adolescent Public MH System Users

- All Males
- Males Arrested Last Yr
- All Females
- Females Arrested Last Yr

Age

Malleable Causes of Offending & Desistance – General Population

**JUVENILES**
- Antisocial peers
- ↓ Parental supervision/monitoring
- Unstructured time (school & afterschool)
- Substance Use
- Rational choice/distorted cognitions
- Attachment to school, prosocial peers, family

**ADULTS**
- Peers influence less
- Parental influence lessened/indirect
- Unstructured time (work)
- Substance Use
- Rational Choice/distorted cognitions
- Attachment to work, spouse
Transition-Age Offenders with SMHCs

- Simply addressing mental health needs found unsuccessful in reducing offending in adults.
- Wraparound approaches have had good outcomes in reducing antisocial behavior in youth with SMHC but is designed for children, not young adults.
Standard MST
(with juveniles 12-17y/o, no SMHC)

- Intensive home-based treatment
- Team of 3-4 therapists; 1 therapist = 4-6 families
- Promote behavioral change by empowering caregivers/parents
- Individualized interventions target comprehensive set of identified risk factors across individual, family, peer, school, and neighborhood domains
- Interventions integrate empirically-based clinical techniques from the CBT and behavioral therapies
- Duration: 3-5 months
MST-EA Treatment Focus

- Treatment of the EA’s antisocial behavior & serious mental health conditions
- Leveraging and developing the EA’s social network
- Integrating a Life Coach & Psychiatrist for EA’s into the MST Team
- Mental Health, Substance Use, and Trauma Interventions
- Targeting housing & independent living skills
- Targeting career goals
- Improving relationship skills
- As needed, teaching parenting curriculum
MST-EA Team

- 3 Therapists
- On-Site Supervisor
- Off-Site Consultant
- 0.2 Psychiatrist/Nurse Practitioner
- Life Coaches (4, totaling 1.0FTE)
- Full Team Caseload = 12
Target Population

- 17-20 year olds with a diagnosed serious mental health condition
- Recent arrest or release from incarceration
- Living in stable community residence (i.e., not homeless)
Research retention

- 90% completed the post tx interview
- Reasons for missing:
  - 1 not locatable
  - 1 formally withdrew
  - 2 completed last interview but tx no complete
- 91% of all interviews were completed
Treatment Retention

Incomplete Tx
minimum # weeks of treatment = 6.5

Complete Tx ranged from 4 to 12 months
Recidivism -
Arrests 6 months Pre vs. 6 month Post treatment (N=41)

Mean # Charges

<table>
<thead>
<tr>
<th>PreTx</th>
<th>Post Tx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.60</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Arrested PreTx = 29%
Arrested Post Tx = 12%

(Wilcoxon, p<.01)
Outcomes

* p<.05, **p<.001 (Related Samples Wilcoxon)
Substance Use

Majority of the cases (84%) have presented in need of treatment for substance-related problems.

NOTES: 22 + screens: 21 THC, 3 opiate, 1 cocaine
Fidelity Scores
(possible score 1 [never] - 4 [always])

Thpst 1 (N=15)  Thpst 2 (N=20)  Thpst 3 (N=18)
Conclusions

- The adaptations to MST for Emerging Adults with Serious Mental Health Conditions successfully engage and retain youth.
- Outcomes are in the desired direction.
- Large scale randomized control trial is needed.
MST-EA: Extending Therapy through Vocational Coaching

Ashli J. Sheidow & Michael R. McCart
Medical University of South Carolina
Charleston, SC, USA

Maryann Davis
University of Massachusetts Medical School
Worcester, MA, USA
MST-EA Coach Objectives

- Engagement with the EA
- Role play and practice new skills with EA
- Coach new skills in vivo
- Deliver reinforcers/incentives
- Focus attention on positive aspects of the EA
- Engage the social network in supporting the EA
MST-EA Coach Curriculum

- Engagement with EA
- Goals & Values
- Education
- Housing
- Transportation
- Nutrition & Meal Planning
- Money Management
- Legal Issues/Social Services
- Household Management
- Health & Safety
- Stress & Coping
- Social Skills & Relationships
- Sexual Health
- Pregnancy & Parenting
- Employment
Context

- EAs with SMHC
  - 42% unemployment
  - 45% high school dropout
- Vocational support programs for EAs
  - 50% competitively employed 18-24 yr olds
- Exiting juvenile corrections
  - <33% obtain work
- Juvenile justice youth receiving MH services about half as likely to be employed as those without MH services
Skill Menus

Standard Coach Domains

<table>
<thead>
<tr>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1: Goals &amp; Values</td>
</tr>
<tr>
<td>Domain 2: Education</td>
</tr>
<tr>
<td>Domain 3: Housing</td>
</tr>
<tr>
<td>Domain 4: Transportation</td>
</tr>
<tr>
<td>Domain 5: Nutrition &amp; Meal Planning</td>
</tr>
<tr>
<td>Domain 6: Money Management</td>
</tr>
<tr>
<td>Domain 7: Legal Issues/Social Services</td>
</tr>
<tr>
<td>Domain 8: Household Management</td>
</tr>
<tr>
<td>Domain 9: Health &amp; Safety</td>
</tr>
<tr>
<td>Domain 10: Stress &amp; Coping</td>
</tr>
<tr>
<td>Domain 11: Social Skills &amp; Relationships</td>
</tr>
<tr>
<td>Domain 12: Sexual Health</td>
</tr>
<tr>
<td>Domain 13: Pregnancy &amp; Parenting</td>
</tr>
</tbody>
</table>

Additional Domains for Vocational Coach

<table>
<thead>
<tr>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1: Career Exploration &amp; Preparation</td>
</tr>
<tr>
<td>Domain 2: Resume</td>
</tr>
<tr>
<td>Domain 3: Job Hunting</td>
</tr>
<tr>
<td>Domain 4: Interviewing</td>
</tr>
<tr>
<td>Domain 5: Keeping a Job</td>
</tr>
</tbody>
</table>
Pilot trial (N=32)

- Clients randomly assigned
- Enhanced vocational coaching or to the standard coaching plus state vocational rehabilitation services
- Baseline: 16% of clients were working
- During Treatment: 53%
- Post-treatment follow-up (n=28): 36%
  - Enhanced vocational coaching: 40%
  - Standard coaching condition: 31%
Outcomes by Condition

- **Vocational Coach**
  - 27% neither working nor in school at baseline
  - 13% neither working nor in school post treatment

- **Non Vocational Coach + VR**
  - 31% neither working nor in school at baseline
  - 39% neither working nor in school post treatment
Satisfaction with Coaches & VR Services
Possible Score=0-9

- VocCoach (n=21)
- NonVocCoach (n=15)
- VR Services (n=10)
Fidelity of Coaches’ Work (N=16)
Possible Score 1=Never to 4=Always

**t(df=61)=2.0, p<.05
*t(df=61)=1.8, p<.10
Coach Condition Influences Therapists’ Work

<table>
<thead>
<tr>
<th>Therapist Adherence Scale (Possible Score 1-4)</th>
<th>Vocational N=23</th>
<th>Standard N=31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Working as Partners</td>
<td>3.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Clarity of the Work</td>
<td>3.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Addressing Social Context*</td>
<td>3.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Common MST Features**</td>
<td>3.6</td>
<td>0.4</td>
</tr>
</tbody>
</table>

* Main Effect of Coach Condition, F(1,53)5.6, p<.05

** Main Effect of Coach Condition, F(1,53)9.3, p<.01
Ashli J. Sheidow

Medical University of South Carolina
sheidoaj@musc.edu
(843) 876-1800
Multisystemic Therapy for Emerging Adults (MST-EA): Utilizing Social Networks in Treatment

Michael R. McCart, Ph.D. & Ashli J. Sheidow, Ph.D.
Medical University of South Carolina, Charleston, SC, USA

Maryann Davis, Ph.D.
University of Massachusetts Medical School, Worcester, MA, USA
Background

- Multisystemic Therapy for Emerging Adults (MST-EA)
  - Adaptation of standard MST for adolescents with antisocial behavior
  - Designed for EAs with serious mental health conditions and criminal justice involvement
- Social network viewed as a critical element of successful intervention
Social Relationships and Health

- Extent and quality of social relations associated with:
  - Mental health
  - Physical health
  - Mortality
- Perceived support might be more important than its actual availability
## Social Relationship Constructs

<table>
<thead>
<tr>
<th>Name</th>
<th>Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social support</td>
<td>Stress buffering</td>
</tr>
<tr>
<td>Social integration</td>
<td>Main effect (independent of stress)</td>
</tr>
<tr>
<td>Social undermining</td>
<td>Relationships as a source of stress</td>
</tr>
</tbody>
</table>

Most effective interventions will target all 3 mechanisms.
Intervention Strategies

- Upgrade skills of natural positive supports and minimize social undermining
- Coaching/mentoring programs
- Social support groups
Utilizing Social Networks in MST-EA

- Identifying and engaging natural supports from the EA’s social network
- Identifying and disengaging clients from negative social network members
- Assignment of a life coach
Utilizing Social Networks in MST-EA

- Social network can differ markedly among clients
- To accommodate, an individualized social network analysis is completed with each EA
- Results in a “map” of each EA’s social relationships
  - Illustrates ways network members can be helpful or contribute risks during treatment
MST-EA Me & My Network

Client:

Therapist:

Date Opened: / /12

Date: / /1:

People so close it is hard to imagine life without them

People not as close but still important

In my network, but not close to

Adapted from Antonucci, TC, Akiyama, H & Landsford, JE (1996). Negative effects of close social relations. Family Relations, 47, 379-384

Me & My Network_03_13_2012
MST-EA Me & My Network

Client: Laressa
Therapist: Sample Case
Date Opened: //09
Date: //09

CODES

S - Safety Support
I - Instrumental
E - Emotional
A - Appraisal
IF - Information
CF - Conflicts, fights:
SU - Substances, incl.
CR - Criminal acts
Alcohol
G - Guns, other
weapons

People so close it is hard to imagine life without them
People not as close but still important

Me & My Network 12-31-08

Adapted from Antonucci, TC, Aklyarna, H, & Landsford, JE (1998) Negative effects of close social relations. Family Relations, 47, 379-384
Norbeck Social Support Questionnaire
(N=37) Possible Scores 0-4

- Emotional Support*
- Instrumental Support
- Size of Network

**Median**

<table>
<thead>
<tr>
<th></th>
<th>PreTx</th>
<th>PostTx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of Network</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*PreTx *PostTx
Conclusion

- Findings from our pilot trial support the feasibility of building network support in an extremely challenging clinical population

- Next steps:
  - Examine the effects of MST-EA on perceived social support and social integration in a larger trial
  - Examine social support/integration as a mechanism of action for the effect of MST-EA on ultimate outcomes (e.g., mental health symptoms, criminal behavior, substance use)