

The Rural Appalachia Project (RAP) Initial Outcomes

Glisson, Schoenwald, Hemmelgarn, Green, Dukes, Armstrong, & Chapman, (2009). *Randomized Trial of MST and ARC in a Two-Level Strategy for Implementing Evidence-based Mental Health Services*. Manuscript submitted for review.

RAP Study Funding



- Research funded by National Institutes of Mental Health (NIMH)(Glisson, Principal Investigator, Schoenwald Co-Investigator)
- Services (MST and usual care) funded by the Bureau of TennCare, Advocare, in Tennessee

Collaborators



- The University of Tennessee (CMHSRC)
- Medical University of South Carolina (FSRC)
- AdvoCare
- Bureau of TennCare
- Youth Villages
- Juvenile Court Judges and School Superintendents in 14 Rural Appalachian Counties
- Tennessee Voices for Children

Rural Appalachia Project Objective



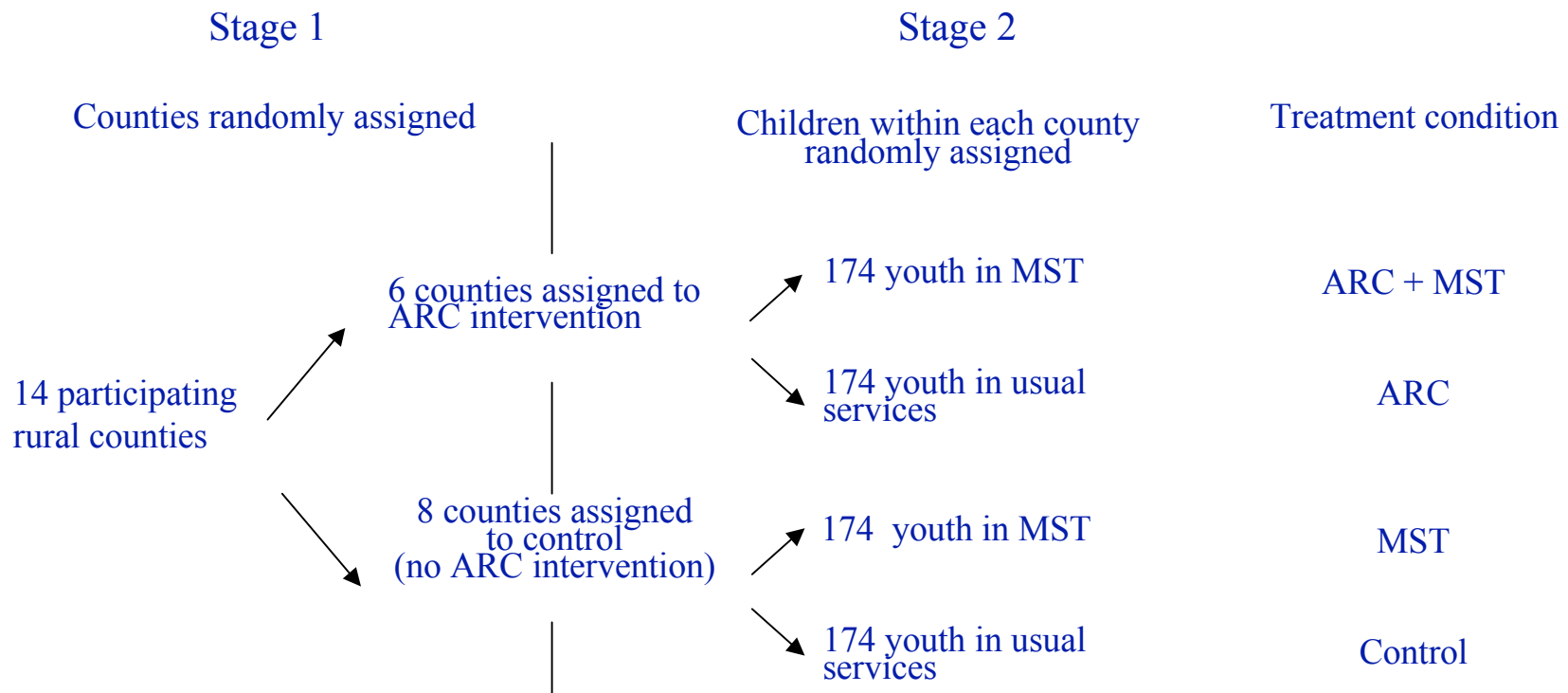
- Evaluate a two-level strategy for overcoming barriers to the implementation of effective treatments for youth in rural, poor communities
 - **Strategy**
 - ✓ Implement an evidenced-based treatment (EBT)-
Multisystemic Therapy (MST)
 - ✓ Implement an organizational-community
intervention (ARC) to support the EBT

Rural Appalachia Project Sample



- Children referred to 14 rural juvenile courts with serious mental health problems
- Community leaders (e.g., juvenile court judges, school superintendents) in the 14 counties
- Teams of MST therapists from Youth Villages

2 -Stage Random Assignment of Counties and Youth



What ARC Is Designed To Do



- Build community support for the services
- Build alliances among service providers and community stakeholders
- Build an organizational culture that encourages desired service provider behaviors
- Build a positive work environment climate for service providers

ARC Strategies



- ARC uses two strategies, *organizational development* and *interorganizational domain development*, to create a social context in the service organization and community that complements and supports effective mental health service technologies.

ARC Organizational Development



- **Designed to create a service organizational culture and climate that:**
 - Focuses attention on needs of front-line service providers
 - Involves service providers in removing barriers to care in the service system and community
 - Involves service providers in the design of organizational processes that improve service effectiveness

ARC Interorganizational Domain Development



- **Creates informal alliances among service providers, community organizations, opinion leaders, and stakeholders to support effective children's services**

ARC Change Agent



- Works at *community level* to develop a stakeholder group to support the implementation of the new technology
- Works at the *organizational level* to facilitate the work of the treatment teams that implement the technology
- Works at the *individual level* to build one-to-one relationships with community opinion leaders (e.g., judges, mayors, ministers, etc.)

ARC Phases



- I. Problem identification
- II. Direction setting
- III. Implementation
- IV. Stabilization

These occur over a period of 12 - 24 months

RAP Study Questions



1. Are MST treatment model fidelity and outcomes better in counties that receive ARC?
2. Are youth behavioral and placement outcomes better in ARC counties than non-ARC counties?
3. Are youth behavioral and placement outcomes better for youth who receive MST compared to youth who receive the usual services?

ARC and MST Fidelity



- There were no differences in therapist or supervisor adherence in ARC and non-ARC counties
- One audio-coded fidelity item - getting perspectives from multiple stakeholders - was rated higher in ARC counties

ARC and Therapist Activity



Therapists spent time somewhat differently in the ARC and non-ARC counties

- MST therapists in ARC counties spent fewer total minutes overall; with the family system; and with the youth's primary caregiver.
- MST therapists in the ARC condition were over three times as likely to address the school-family linkage.
- MST therapists in the ARC condition rated progress with extra-familial systems more highly.

Parent Reported Placement



At approximately 18-month follow-up

- **ARC reduced the odds of placement by 36%**
- **MST reduced the odds of placement by 45%**
- **Together, MST and ARC reduced the odds of placement by 52%**

Parent-Reported Outcomes



- In the MST + ARC counties, youth CBCL Total Problem Behavior T scores decreased significantly to non-clinical levels by the six-month follow-up, but remained at clinical levels for youth in the MST only, ARC only, and control conditions.

Still to Come

- **Outcomes data from archival sources (non-parent reported data on youth criminal activity, out-of-home placement)**
- **Cost evaluation**
- **Mediation analyses. By what mechanisms did ARC affect MST outcomes?**