MST Treatment Model

Here you will find information about the Multisystemic Therapy treatment model. This information is intended to provide an introduction to MST. It would be unrealistic to attempt to provide a comprehensive description of MST through the World Wide Web. Through years of ongoing research and development, an extensive amount of information has been compiled about this treatment methodology. Further information about the model and its implementation can be obtained from the MST Publications List and the organizations and individuals organizations and individuals identified in Contact Information.

MST Treatment Model

Multisystemic Therapy at a Glance:

The following section provides a review for those in need of a base understanding of the Multisystemic Treatment model and its implications. For a brief overview of the model refer to the Multisystemic Therapy At a Glance web page.

EXECUTIVE SUMMARY

Background

Multisystemic Therapy (MST) was developed in the late 1970s to address several limitations of existing mental health services for serious juvenile offenders. These limitations include minimal...
effectiveness, low accountability of service providers for outcomes, and high cost.

Treatment efforts, in general, have failed to address the complexity of youth needs, being individually-oriented, narrowly focused, and delivered in settings that bear little relation to the problems being addressed (e.g., residential treatment centers, outpatient clinics). Given overwhelming empirical evidence that serious antisocial behavior is determined by the interplay of individual, family, peer, school, and neighborhood factors, it is not surprising that treatments of serious antisocial behavior have been largely ineffective. Restrictive out-of-home placements, such as residential treatment, psychiatric hospitalization, and incarceration, fail to address the known determinants of serious antisocial behavior and fail to alter the natural ecology to which the youth will eventually return. Furthermore, mental health and juvenile justice authorities have had virtually no accountability for outcome, a situation that does not enhance performance. The ineffectiveness of out-of-home placement, coupled with extremely high costs, have led many youth advocates to search for viable alternatives. MST is one treatment model that has a well-documented capacity to address the aforementioned difficulties in providing effective services for juvenile offenders.

Theoretical Rationale/Conceptual Framework

Consistent with social-ecological models of behavior and findings from causal modeling studies of delinquency and drug use, MST posits that youth antisocial behavior is multidetermined and linked with characteristics of the individual youth and his or her family, peer group, school, and community contexts. As such, MST interventions aim to attenuate risk factors by building youth and family strengths (protective factors) on a highly individualized and comprehensive basis. The provision of home-based services circumvents barriers to service access that often characterize families of serious juvenile offenders. An emphasis on parental empowerment to modify the natural social network of their children facilitates the maintenance and generalization of treatment gains.

Brief Description of Intervention

MST is a pragmatic and goal-oriented treatment that specifically targets those factors in each youth’s social network that are contributing to his or her antisocial behavior. Thus, MST interventions typically aim to improve caregiver discipline practices, enhance family affective relations, decrease youth association with deviant peers, increase youth association with prosocial peers, improve
youth school or vocational performance, engage youth in prosocial recreational outlets, and develop an indigenous support network of extended family, neighbors, and friends to help caregivers achieve and maintain such changes. Specific treatment techniques used to facilitate these gains are integrated from those therapies that have the most empirical support, including cognitive behavioral, behavioral, and the pragmatic family therapies.

MST services are delivered in the natural environment (e.g., home, school, community). The treatment plan is designed in collaboration with family members and is, therefore, family driven rather than therapist driven. The ultimate goal of MST is to empower families to build an environment, through the mobilization of indigenous child, family, and community resources, that promotes health. The typical duration of home-based MST services is approximately 4 months, with multiple therapist-family contacts occurring each week.

Although MST is a family-based treatment model that has similarities with other family therapy approaches, several substantive differences are evident. First, MST places considerable attention on factors in the adolescent and family’s social networks that are linked with antisocial behavior. Hence, for example, MST priorities include removing offenders from deviant peer groups, enhancing school or vocational performance, and developing an indigenous support network for the family to maintain therapeutic gains. Second, MST programs have an extremely strong commitment to removing barriers to service access (see e.g., the home-based model of service delivery). Third, MST services are more intensive than traditional family therapies (e.g., several hours of treatment per week vs. 50 minutes). Fourth, and most important, MST has well-documented long-term outcomes with adolescents presenting serious antisocial behavior and their families. The strongest and most consistent support for the effectiveness of MST comes from controlled studies that focused on violent and chronic juvenile offenders.

Evidence of Program Effectiveness

The first controlled study of MST with juvenile offenders was published in 1986, and since then, numerous randomized clinical trials with violent and chronic juvenile offenders have been conducted. In these trials, MST has demonstrated:

- reduced long-term rates of criminal offending in serious juvenile offenders,
- decreased recidivism and rearrests,
- reduced rates of out-of-home placements for serious juvenile offenders,
extensive improvements in family functioning,
decreased behavior and mental health problems for serious juvenile offenders,
favorable outcomes at cost savings in comparison with usual mental health and juvenile justice services.

This success has led to several randomized trials and quasi-experimental studies aimed at extending the effectiveness of MST to other populations of youth presenting serious clinical problems and their families. For more information on the evaluations of MST refer to the Research on Effectiveness web page.

GOALS AND MEASURABLE OBJECTIVES

The primary goals of MST programs are to:

- decrease rates of antisocial behavior and other clinical problems,
- improve functioning (e.g., family relations, school performance),
- achieve these outcomes at a cost savings by reducing the use of out-of-home placements (e.g., incarceration, residential treatment, hospitalization).

MST aims to achieve these goals through a treatment that addresses risk factors in an individualized, comprehensive, and integrated fashion; and that empowers families to enhance protective factors.

TARGETED RISK AND PROTECTIVE FACTORS

The empirical literature strongly supports a social-ecological view (Bronfenbrenner, 1979) of antisocial behavior in children and adolescents. The central tenet of this view is that behavior is multidetermined through the reciprocal interplay of the child and his or her social ecology, including the family, peers, school, neighborhood, and other community settings. Consistent with this perspective, associations have been observed between various forms of antisocial behavior and key characteristics (i.e., risk and protective factors) of individual youths and the social systems in which they are embedded (i.e., family, peer, school, neighborhood). In general, these risk and protective factors are relatively constant, whether the examined antisocial behavior is conduct disorder, delinquency, or substance abuse. A generic list of identified risk and protective factors is provided in Table 1.

In light of the multiple known determinants of antisocial behavior, at least twenty research groups
have conducted sophisticated causal modeling studies in an attempt to describe the interrelations among these correlates. Findings from the fields of delinquency and substance abuse have been relatively clear and consistent. First, association with deviant peers is virtually always a powerful direct predictor of antisocial behavior. Second, family relations either predict antisocial behavior directly (contributing unique variance) or indirectly through predicting association with deviant peers. Third, school difficulties predict association with deviant peers. Fourth, neighborhood and community support characteristics add small portions of unique variance or have an indirect role in predicting antisocial behavior. Across studies and in spite of considerable variation in research methods and measurement, investigators have shown that youth antisocial behavior is linked directly or indirectly with key risk and protective factors of youth and of the systems in which they interact.

Table 1. Risk and Protective Factors

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<th>CONTEXT</th>
<th>RISK FACTORS</th>
<th>PROTECTIVE FACTORS</th>
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| Individual | low verbal skills  
favorable attitudes toward antisocial behavior  
psychiatric symptomatology  
cognitive bias to attribute hostile intentions to others | intelligence  
being firstborn  
easy temperament  
conventional attitudes  
problem-solving skills |
| Family | lack of monitoring  
ineffective discipline  
harsh and inconsistent discipline  
low warmth  
high conflict  
parental difficulties, e.g., drug abuse, psychiatric conditions, criminality | attachment to parents  
supportive family environment  
marital harmony |
| Peer | association with deviant peers  
poor relationship skills  
low association with prosocial peers | bonding with prosocial peers |
### Implications of Risk Factors and Protective Factors for Treatment

The clinical implications of these findings seem relatively straightforward. If the primary goal of treatment is to optimize the probability of decreasing rates of antisocial behavior, then treatment approaches must have the flexibility to attenuate the multiple known determinants of antisocial behavior (i.e., risk factors), while enhancing protective factors. That is, effective treatment must have the capacity to intervene comprehensively, at individual, family, peer, school, and possibly even neighborhood levels.

With regard to MST in particular, interventions are designed to address those risk factors and protective factors that are closest to identified treatment goals. Thus, in any one case, MST will address an individualized subset of risk and protective factors. Because of the broad variety of potentially important risk and protective factors, however, MST must have the capacity to address a broad and comprehensive range of pertinent variables. Consequently, the identification of the key variables in a particular case is the major task of assessment in MST.
THE TREATMENT THEORY

Theoretical Framework

With roots in social ecological (Bronfenbrenner, 1979) and family systems (Haley, 1976, Minuchen, 1974) theories, MST views youths as embedded within multiple interconnected systems, including the nuclear family, extended family, neighborhood, school, peer culture, and community (see Figure 1). The juvenile justice, child welfare and mental health systems also might be involved. In assessing the major determinants of identified problems, the clinician considers the reciprocal and bi-directional nature of the influences between a youth and his or her family and social network as well as the indirect effects of more distant influences (e.g., parental workplace). For a treatment to be effective, the risk factors across these systems must be identified and addressed. Hence, the “ecological validity” of assessing and treating youth in the natural environment is emphasized under the assumption that favorable outcomes are more likely to be generalized and sustained when skills are practiced and learned where the youth and family actually live.

Figure 1. Ecological Model

Bronfenbrenner (1979)
Conceptual Assumptions

Several assumptions are critical to the design and implementation of MST interventions:

Multidetermined nature of serious clinical problems:

As suggested from the social ecological theoretical model and supported by decades of correlational and longitudinal research in the area of youth antisocial behavior, such behavior is multidetermined from the reciprocal interplay of individual, family, peer, school, and community factors. As such, MST interventions assess and address these potential risk factors in a comprehensive, yet individualized, fashion.

Caregivers are key to long-term positive outcomes:

Ideally the caregiver is a parent, but another adult (e.g., grandparent, aunt, uncle, sibling) with an enduring emotional tie to the youth can serve in this role. Often, other caring adults from the youth’s ecology are identified to provide social support, as well. Professional supports are introduced only after exhausting resources in the family’s natural ecology. Paid professionals may genuinely care, but invariably leave the youth’s life for reasons such as professional advancement or termination of treatment. Thus, by focusing clinical attention on developing the caregiver’s ability to parent effectively and strengthening the family’s indigenous support system, treatment gains are more likely to be maintained.

Integration of evidence-based practices:

MST incorporates empirically based treatments insofar as they exist. Thus, MST programs include cognitive behavioral approaches, the behavior therapies, behavioral parent training, pragmatic family therapies, and certain pharmacological interventions that have a reasonable evidence base (U.S. Department of Health and Human Services [DHHS], 1999). As suggested by other assumptions noted in this section, however, these treatments are delivered in a considerably different context than usual. For example, consistent with the view that the caregiver is key to achieving long-term outcomes, a MST cognitive behavioral intervention would ideally be delivered by the caregiver under the consultation of the therapist.
Intensive services that overcome barriers to service access:

In light of the serious clinical problems presented by youths and their families in MST programs (i.e., referral criteria include high-risk of out-of-home placement) and the high dropout rates of such youths and families in traditional treatment programs, clinicians provide intensive services with a commitment to overcome barriers to service access. The home-based model of service delivery employed in MST facilitates the provision of intensive services and overcomes barriers to service access, as described subsequently.

Rigorous quality assurance system:

Treatment fidelity is needed to achieve desired clinical outcomes. Hence, intensive quality assurance protocols are built into all MST programs, which differentiates MST from most mental health practices. The quality assurance system, which includes training and monitoring components, is detailed subsequently. Together, these quality assurance components aim to enhance clinical outcomes through promoting treatment fidelity. Empirical validation of several key aspects of the MST quality assurance system also is described in more detail subsequently.

CORE PROGRAM ELEMENTS - THE NINE MST PRINCIPLES

Treatment Principles

The complexity of serious clinical problems presented by adolescents and their families requires considerable flexibility in the design and delivery of interventions. As such, MST is operationalized through adherence to nine core treatment principles that guide treatment planning. These principles serve to operationalize MST, and evaluations of treatment fidelity are based on participants' (i.e., parent, youth, therapist) ratings of therapists' adherence to these principles. It has been found that high adherence to the MST principles predicts favorable long-term outcomes for violent and chronic juvenile offenders, whereas poor adherence predicts high rates of rearrest and incarceration (Henggeler, Melton, Brondino, Scherer, & Hanley, 1997; Henggeler, Pickrel, & Borduin, 1999; Huey, Henggeler, Brondino, & Pickrel, 2000; Schoenwald, Henggeler, Brondino, & Rowland, 2000). In light of these findings and years of anecdotal evidence (i.e., suggesting high adherence is linked with
favorable outcomes and low adherence with poor outcomes), considerable training, supervisory, and consultative resources are devoted to maximizing therapist adherence to the following MST treatment principles. Brief summaries of the nine MST principles follow although an extensive explication is provided in Henggeler, Schoenwald, Borduin, Rowland, & Cunningham (1998).

**Principle 1: Finding the Fit**

The primary purpose of assessment is to understand the “fit” between identified problems and their broader systemic context and how identified problems “make sense” in the context of the youth’s social ecology.

**Principle 2: Positive and Strength Focused**

Therapeutic contacts emphasize the positive and use systemic strengths as levers for positive change. Focusing on family strengths has numerous advantages, such as decreasing negative affect, building feelings of hope, identifying protective factors, decreasing frustration by emphasizing problem-solving, and enhancing caregivers’ confidence.

**Principle 3: Increasing Responsibility**

Interventions are designed to promote responsible behavior and decrease irresponsible behavior among family members. The emphasis on enhancing responsible behavior is contrasted with the usual pathology focus of mental health providers and kindles hope for change.

**Principle 4: Present-Focused, Action-Oriented and Well-Defined**

Interventions are present-focused and action-oriented, targeting specific and well-defined problems. Such interventions enable treatment participants to track the progress of treatment and provide clear criteria to measure success. Family members are expected to work actively toward goals by focusing on present-oriented solutions (versus gaining insight or focusing on the past). Clear goals also delineate criteria for treatment termination.
Principle 5: Targeting Sequences

Interventions target sequences of behavior within and between multiple systems that maintain the identified problems. Treatment is aimed at changing family interactions in ways that promote responsible behavior, and broaden family links with indigenous prosocial support systems.

Principle 6: Developmentally Appropriate

Interventions are developmentally appropriate and fit the developmental needs of the youth. A developmental emphasis stresses building youth competencies in peer relations and acquiring academic and vocational skills that will promote a successful transition to adulthood.

Principle 7: Continuous Effort

Interventions are designed to require daily or weekly effort by family members, presenting youth and family frequent opportunities to demonstrate their commitment. Advantages of intensive and multifaceted efforts to change include more rapid problem resolution, earlier identification of treatment nonadherence, continuous evaluation of outcomes, more frequent corrective interventions, more opportunities for family members to experience success, and family empowerment as members orchestrate their own changes.

Principle 8: Evaluation and Accountability

Intervention effectiveness is evaluated continuously from multiple perspectives with MST team members assuming accountability for overcoming barriers to successful outcomes. MST does not label families as "resistant, not ready for change or unmotivated." This approach avoids blaming the family and places the responsibility for positive treatment outcomes on the MST team.

Principle 9: Generalization

Interventions are designed to promote treatment generalization and long-term maintenance of
therapeutic change by empowering caregivers to address family members’ needs across multiple systemic contexts. The caregiver is viewed as the key to long-term success. Family members make most of the changes, with MST therapists acting as consultants, advisors, and advocates.

**TREATMENT SPECIFICATION AND CLINICAL PROCEDURES**

**Treatment Format**

MST works with youth, family members, and all pertinent systems in which the youth is involved including peers, school, extended family, family supports, the neighborhood, community groups, and other involved agencies such as child welfare or juvenile justice. Early in treatment, specific measurable overarching goals and functionally meaningful outcomes are set in collaboration with the family, and as appropriate, other stakeholders. MST overarching goals are broken down into measurable weekly goals. Any person or agency that may influence attainment of these goals is engaged by the therapist and caregiver with specific interventions designed to encourage actions that will facilitate goal achievement.

Strong engagement with the family is essential for successful outcomes, and the MST treatment model incorporates strategies to encourage cooperative partnering. Families are treated with respect and are assumed to be doing the best they can. Other youth-associated systems are viewed as vital partners in the treatment process. The MST team focuses on system strengths (Principle 2) and is responsive to families’ needs. Barriers to engagement are evaluated continuously and addressed as needed (Principles 1 and 8).

**Model of Service Delivery**

MST is provided via a home-based model of service delivery, and the use of such a model has been crucial to the high engagement and low dropout rates obtained in MST outcome studies (e.g., Henggeler, Pickrel, Brondino, & Crouch, 1996). The critical service delivery characteristics utilized in MST include:
Low caseloads to allow intensive services:
An MST team consists of 2-4 full-time therapists, a .50 time supervisor per team, and appropriate organizational support. Each therapist works with 4-6 families at a time. The therapist is the team's main point of contact for the youth, family and all involved agencies and systems.

Delivery of services in community settings
(e.g., home, school, neighborhood center) to overcome barriers to service access, facilitate family engagement in the clinical process, and provide more valid assessment and outcome data.

Time-limited duration of treatment
(4 months on average) to promote efficiency, self-sufficiency, and cost effectiveness.

24 hour/day and 7 day/week availability of therapists
to provide services when needed and to respond to crises. MST is proactive, and plans are developed to prevent or mitigate crises. Crisis response can be taxing, but most families are appreciative, and a supportive response can enhance engagement. Moreover, the capacity to respond to crises is critical to achieving a primary goal of MST programs – preventing out-of-home placements.

Skills and Achievements Emphasized in Treatment
Interventions are designed to be consistent with the nine core principles of MST, to be empirically based whenever possible, and to emphasize behavior change in the youth’s natural environment that empowers caregivers and youth. A more extensive description of the range of problems addressed and clinical procedures used in MST can be found in the MST treatment manuals (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998; Henggeler, Schoenwald, Rowland, & Cunningham, 2002).

Family interventions:
Engagement and assessment usually begin with meeting the family and youth to explain MST philosophies and principles. In the MST model, the therapist is more closely aligned with the caregivers, relative to the youth. Allying and engaging with caregivers is a critical component of the initial phase of treatment. Youth also are involved in the intake process, but as might be expected, some are reluctant to engage in a process that usually aims to place them under increased parental
control. Each household member’s perspective of the presenting problem and goals for treatment are solicited. A genogram is created and information is obtained about the family, other people living in the home, extended family members, family supports, and the quality of important relationships. Guided by information obtained from the initial family meeting and other referring agencies, the MST therapist meets with these individuals or other organizations (e.g., school personnel, community members) to gain their perspectives. Each system is assessed for strengths and weaknesses, and values of the ecology are incorporated into the treatment plan. Based on these initial data, hypotheses are generated concerning the factors that might facilitate goal achievement, serve as barriers to progress, and maintain negative behaviors. Hypotheses are testable, and hypothesis testing establishes the basis for interventions.

The MST therapist and treatment team must be well informed about research pertaining to family patterns and effective interventions relevant to youth antisocial behavior and related clinical problems. Family risk factors for antisocial behavior, for example, include low caregiver monitoring, low warmth, ineffective discipline, high conflict, caregiver psychopathology, and family criminal behavior; while protective factors include secure attachment to caregivers, supportive family environment, and marital harmony. Thus, the therapist must be capable of assessing the affective bond between caregiver and youth, parental control strategies on a permissive to restrictive continuum, and instrumental aspects of parenting such as structure and consistency. These family processes are assessed with direct questioning, observation, and response to homework assignments. Subsequent interventions aim to optimize strengths that already exist and develop competencies in critical areas that are lacking.

The MST therapist chooses specific parenting interventions with the assistance of the MST supervisor and expert consultant. The assessment of the “fit” of the particular problem to be addressed and the process of the implementation are pivotal to the selection. In a supportive and non-blaming manner, MST therapists praise positive aspects of parenting (Principle 2), while diplomatically identifying current parenting practices that might be changed for the benefit of all. For example, in a situation in which increased disciplinary structure is needed, interventions likely would occur in three stages. First, the caregivers learn to develop clearly defined rules for observable youth behavior. Second, the caregivers establish rewards and consequences that closely, consistently, and naturally are connected to youth behavior. Third, caregivers learn to monitor their child’s compliance with the rules, including when the youth is not being observed directly by the
caregiver. In so doing, guidelines specified by Munger (1993, 1998) often are followed. Expected behaviors are clearly defined and specified so the youth and everyone involved with the youth can determine whether the behavior has occurred. The rules should be posted in a public place and reinforced 100% of the time, in an emotionally neutral manner. Praise should accompany the dispensation of rewards. When two caregivers are involved, rules should be mutually agreed upon and enforced by both caregivers. Consequences need to be meaningful and appropriate to the specific youth. That is, rewards need to be items or activities that the particular youth is motivated to earn, while negative consequences should be disliked. Basic privileges, such as food, clothing, shelter and love are to be provided unconditionally, and are not withheld or varied in their availability to the youth. Activities that promote prosocial development (e.g. sports teams) are considered growth activities and typically should not be withheld. Because of changes in the system or understanding of the fit, components of the behavior plan, such as the target behaviors, rewards and consequences need to be continuously assessed and modified when appropriate.

Importantly, frequent barriers to the success of these family interventions pertain to caregiver difficulties such as substance abuse or untreated mental illness. In such cases, the therapist’s primary task is to remove these barriers to caregiver effectiveness by treating them directly. For example, a substance abusing parent might be treated with a variation of the Community Reinforcement Approach (Budney & Higgins, 1998), which has a strong empirical base in the area of adult substance abuse (Roozen et al., 2004). Similarly, when caregiver effectiveness is compromised due to high levels of stress, the therapist works closely with the caregiver to identify sources of stress that might be modified and to develop strategies for such change. For example, a single working parent might have significant daily demands from employment responsibilities, caring for younger children, and providing support for an elderly relative. This parent might not have the time and energy needed to provide the high level of monitoring and supervision a problem adolescent often requires. Hence, the therapist would collaborate with the parent in developing and implementing strategies to achieve the desired goals (e.g., engaging the adolescent in structured after school activities, enlisting other supports to help with the elderly relative). When barriers to effectiveness are removed, the caregiver is then in a position to function as the key change agent.

**Peer interventions:**

Peer relations affect youth functioning in many ways. Socialization with antisocial or substance
using peers is associated with these respective behaviors, while involvement with prosocial peers is a protective factor. Assessment of peer relations involves interviewing caregivers, school personnel, siblings, and the youth, as well as observation. The MST therapist attends to the number and quality of the peer relations, reputations of peers, social and academic functioning of peers, homogeneity versus heterogeneity of peer group, monitoring of peers by their respective caregivers, and the caregivers’ familiarity with youth’s peers and their parents.

Limited or poor social skills will contribute to rejection and isolation from peers. The MST therapist should assess the caregiver’s social skills, and address any caregiver factors that may be contributing to youth socialization difficulties. Some awkwardness may be due to a basic lack of skills or cognitive distortions. Depending on the problem, youth may respond to direct instruction, coaching techniques, and role-playing as described by Forman (1993), for example; and the MST therapist will help the caregiver to assist the youth as indicated.

Conversely, youth that are rejected actively are at risk for externalizing behaviors. Peer groups can contribute directly to the youth’s disruptive behavior through diverting youth from more socially acceptable activities, endorsing antisocial behavior as the group norm, providing access to drugs, and encouraging resistance to caregiver monitoring. If the youth is socializing with negative peers, the MST therapist will help the caregiver to have calm discussions about potential negative consequences, and avoid criticizing the peers valued by the youth. Interventions to back up these conversations might include systemic monitoring of the youth, caregiver and supportive adults searching places where the deviant peer group tends to socialize if the youth is unaccounted for, asking law enforcement to assist with checking and monitoring, and disallowing telephone contact with antisocial peers. Thus, a relatively stringent plan is put into place to provide significant sanctions for continued association with problem peers. Concomitantly, MST therapists support caregivers to encourage and reinforce youth contact with prosocial peers and participation in socially accepted and monitored activities. Critical to the success of these interventions is the proactive development of plans to insure implementation of positive and negative consequences contingent on the youth’s peer interactions. Such plans often include the therapist and several adults in the family’s social network.

**School interventions:**
School is critical for both academic and social development. Risk factors for disruptive behavior in school include limited intellectual functioning, low achievement, learning disabilities, chaotic family functioning, negative family-school linkage, low commitment to education, and chaotic school environment. Protective factors include high intellectual functioning, commitment to schooling, and good caregiver-school communication. During all school interventions, MST therapists must respect the school’s policies and procedures.

A frequent goal of treatment is to develop a collaborative relationship between the youth’s caregivers and school personnel, in a context that typically has grown conflictual. The therapist supports the caregiver in interacting with the school, but becomes directly involved if necessary. For instance, when there is a family-school conflict impasse, the MST therapist might intervene in a diplomatic manner, emphasizing the best interests of the youth. The MST therapist performs a careful assessment of the nature of the conflict and understands the views of all involved parties to help establish trust with both the family and the school. Unseen efforts of the school can be conveyed to the caregivers, and vice-versa, while some misperceptions can be challenged gently. Common ground is highlighted, with a goal of setting up collaborative interactions between the school and caregivers. Ideally, these collaborations emphasize positive constructive changes that can help the youth, and avoid revisiting prior decisions that cannot be changed or assigning blame for any real or perceived negative events. Importantly, arrangements often are made in which the parent is responsible for implementing contingencies at home based on youth behavior in school.

**Individually oriented interventions:**

Whether for youth or caregivers, MST individually oriented interventions always occur in the context of a larger systemic treatment plan. Individually oriented interventions can be categorized as those addressing: continued problematic behaviors after the implementation of systemic interventions; continued problematic behaviors that occur in the face of psychiatric disorders that are being optimally treated from medication and systems perspectives; sequelae of victimization that relate to the presenting problems; and situations where extensive efforts to engage caregivers in changing their behavior are unsuccessful, and the youth will continue to live in the home.

Cognitive-behavioral therapy (CBT) is an individual treatment approach that frequently is used in
MST individual interventions. Considering the range of all individual treatments provided to youth, the empirical support for CBT for anxiety, depression and externalizing conditions is relatively strong (Weisz & Jensen, 1999). CBT is consistent with MST in that it is present-focused and action oriented (Principle 4), individualized to the developmental level of the youth (Principle 6), evaluated from multiple perspectives (Principle 8), and provides a skill that potentially is generalizable (Principle 9). Briefly, CBT involves first evaluating the youth’s cognitions in areas related to the identified problem. This may include examining the youth’s planning in achieving an objective, attributions regarding the motivation of others, social problem solving, perspective taking, or assessment of consequences of actions. The relationships between these cognitions and the youth’s feelings and behaviors also are evaluated. Cognitive deficiencies and distortions are assessed as they apply to the presenting problem. Cognitive deficiencies are addressed with the acquisition of additional skills. When cognitive distortions are identified, they are tested; underlying maladaptive assumptions are delineated and the validity of the maladaptive assumptions is tested. More adaptive cognitions and behaviors are then learned. Fortunately, several excellent resources for CBT interventions for various conditions are available (e.g., Forman, 1993; Kendall, 2005), and MST therapists are referred to and supervised in the implementation of these works as appropriate.

Psychiatric interventions:

MST therapists must be familiar with and able to recognize youth and adult conditions that may respond to psychiatric medication. For example, attention-deficit/hyperactivity disorder (ADHD) often is comorbid with disruptive behaviors, and the prognosis of comorbid ADHD and conduct disorder is associated with more negative outcomes than conduct disorder or ADHD alone. Stimulant medications are well studied; and positive effects have been demonstrated for on-task behavior and various externalizing behaviors, while side effects also are characterized well and generally are manageable.

If the MST treatment team feels that symptoms consistent with ADHD are interfering with goal achievement, a stimulant trial may be indicated. If reluctant to follow through on the referral, the feelings of the family should be respected, while determining the fit and appropriate interventions. MST teams should seek child and adolescent psychiatrists who are systems oriented and well versed in empirically based treatments. The MST therapist can promote a positive working relationship by supporting youth and family follow-through with appointments and medication
compliance, while helping empower youth and caregivers to collaborate actively and assertively with the psychiatrist. After establishing a diagnosis of ADHD, a double-blind placebo trial may address some family concerns regarding efficacy and short-term side effects. Research suggests that for optimal pharmacological treatment of ADHD, on-going medication management is needed (Vitiello et al, 2001).

Interventions for increasing family social supports:

A major goal of MST is to develop and maintain social supports for the youth and family in order to promote sustainability of treatment gains. Youth disruptive behavior is associated with increased need for family supports and resources, yet many of the families referred to MST have few resources. Low socioeconomic status, social disorganization and lack of supportive structures in and of themselves are risk factors for disruptive behavior (Loeber & Farrington, 1998). Conversely, resources can help families manage the challenges of raising children as well as mitigate the negative effects of many hardships (Wolkow & Ferguson, 2001).

Assessment of family social supports occurs during the assessment of other youth-involved systems. Social supports can be characterized by type of support: instrumental, emotional, appraisal, and informational (Unger & Wandersman, 1985) and also on a continuum ranging from informal, proximal relationships, to more distal, professional and formal systems. The preference is to develop more proximal informal supports, as these are likely to be more responsive, accessible, and maintained over time. To maintain long-term informal social supports, families who receive support must reciprocate. For example, a neighbor might be enlisted to help monitor the after school time of a problem adolescent with working parents; and in return, the caregivers might cut the neighbor’s lawn each week. Even with strong indigenous support, however, family needs can sometimes overwhelm the informal support system, necessitating the use of more formal supports. Hence, the MST treatment team should have a good understanding of the available formal supports in the community.

Treatment Termination

The average duration of MST treatment is 4 months. MST typically ends in one of two ways. Either
the goals are met, by mutual agreement of the therapist and family and, as appropriate, stakeholders; or the goals are unmet, but it is felt that treatment has reached a point of diminishing returns for time invested. It is important for the MST team to recognize situations where progress is not being made, despite varied attempts to address barriers to effective change. In such cases, the decision to terminate MST services will contribute to the cost effectiveness of MST, and provide the family an opportunity to try another type of treatment that might be helpful.

Approximately two-thirds of MST cases in community settings end with successful achievement of the goals specified by the family and influential stakeholders. The latter stage of MST is spent preparing the youth, family, and stakeholders for the withdrawal of MST services, and termination is openly discussed. Caregiver competence is highlighted, and mechanisms for maintaining progress are identified. If there is a need for further services, appropriate referrals are made. However, it should not be assumed that families need ongoing services.

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