

# **Best Practices in Children's Mental Health:**

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## **Report #5** **"Family Centered Home-Based Models** **for Placement Prevention"** **February, 2003**

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Author: Tara Swaim, LSCSW

Project Coordinator: Chris Petr, Ph.D., LSCSW

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# **Family Centered Home-Based Models for Placement Prevention**

## **Executive Summary**

Since the 1970's, interest in enabling children at risk for out-of home placement to remain living safely in their families and communities has increased. As a result of this, several family centered, home-based models with the goal of preventing removal of the child have developed. This paper examines four of these models: Multisystemic Therapy, Homebuilders, Wraparound, and Case Management. Theoretical foundations, provider credentials, caseload size, duration and frequency of service, and research base of the four approaches are examined and compared.

These models share the paramount goal of maintaining children in the family home. They also avoid pathologizing the client, family, and surrounding systems. MST and Wraparound have the most saliently developed theoretical frameworks. Guidelines for MST provider credentials, caseload size, and duration/ frequency of service are clearly established. While these components of Wraparound are not delineated, per se, Wraparound developers are very clear that each individual family's needs should dictate these dynamics. Homebuilders has saliently developed structure in reference to caseload size and duration/frequency of service, but lacks specificity of provider credentials. Case Management is the least clearly defined in the literature. Finally, MST has the most well-developed and conclusive research base and Wraparound researchers are working diligently to create a larger, more qualitative research base. The literature indicates Case Management has an underdeveloped and inconclusive research foundation, while the research base specific to Homebuilders is comparatively large but is relatively inconclusive.

Based solely on the descriptive aspects of the models, one could make choices regarding model implementation according to the type of target population served and intervention purpose. MST and Homebuilders are designed for juvenile offender and child welfare populations, respectively, to prevent placement through intensive, short-term therapy. Case Management and Wraparound are designed to provide long-term supports and services for severely emotionally disturbed (SED) populations. While there are no studies to confirm this in practice situations, short-term models, such as MST and Homebuilders, likely provide time-limited interventions, and clients are then referred to a program utilizing a long term model, such as Wraparound or Case Management, for ongoing monitoring and support.

# **Family Centered Home-Based Models for Placement Prevention**

## **INTRODUCTION**

In the past 25 years, "family preservation" has been interpreted as serving many different functions. Hartman (1993, pg. 511) states, "The term 'family preservation' has become so popular that anybody doing anything helpful in relation to a family could claim they were doing it. Multiple definitions make it meaningless." Alstein & McRoy (2000) point out that the term has been used to define a practice model (Kinney, Haapala, & Booth, 1991), a philosophy of guiding principles (Ronnau & Salee, 1993), a service delivery system (Henggler, Melton, & Smith, 1993), and an implementation of policy (Adoption Assistance and Child Welfare Act of 1980).

In this report, the term "family preservation" is avoided and specific program description is utilized. It is also important to note that, in the literature, terms such as "case manager" and "wraparound" are not always used in the way in which they are for the purpose of this analysis. These terms are often used generically and used to describe functions and processes which occur within the context other treatment approaches. Additionally, in this analysis of Multisystemic Therapy, Homebuilders, Wraparound, and Case Management, the ultimate goal of all these programs is presumed to be the prevention of unnecessary out-of-home placement of children or returning children home who have been removed and enabling these children to successfully reintegrate and safely remain in the home.

A full description of each model is presented and cross-referenced in Table I. Next, the empirical research on each model is discussed and summarized in Tables II-V. Finally, the models are compared and contrasted in the summary. This structure facilitates answering three study questions.

- 1) What is the definition of each of the four models?
- 2) What is the empirical research pertaining to each model?
- 3) What conclusions and comparisons can be drawn regarding the models?

## **DESCRIPTION OF MODELS - Cross referenced in Table I**

### **Multisystemic Therapy**

MST is a home-based services approach that provides integrative, family-centered treatment. According to Henggeler (1997) it was developed in the last twenty years in response to the lack of scientifically proven, cost-effective treatment for children who display behaviors that place them at risk for out-of-home placement. MST was specifically designed to respond to the needs of adolescents who exhibit serious antisocial behavior (Henggeler, 1997), but has been applied to situations of abuse/neglect, parents who experience substance abuse, as an alternative to psychiatric hospitalization, and adolescent sex offenders (Henggeler et al., 1998).

This service method is based upon the understanding that serious antisocial behavior in youths and their families is multidetermined and systemic in nature. MST is specifically based upon systems theory and social ecology, focusing on interventions that promote positive change in family and the identified adolescent (Burns et al., 2000).

Henggeler et al. (1998) outlined nine basic principles that guide the integrative approach to service.

1. The primary purpose of assessment is to understand the fit between the identified problems and their broader systemic context.
2. Therapeutic contacts emphasize the positive and use systemic strengths as levers for change.
3. Interventions are designed to promote responsible behavior and decrease irresponsible behavior among family members.
4. Interventions are present focused and action oriented, targeting specific and well-defined problems.
5. Interventions target sequences of behavior within and between multiple systems that maintain the identified problem.
6. Interventions are developmentally appropriate and fit the developmental needs of the youth.
7. Interventions are designed to require daily or weekly effort by family members.
8. Intervention effectiveness is evaluated continuously from multiple perspectives with providers assuming accountability for overcoming barriers to successful outcomes.
9. 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.

Each therapist creates an individualized intervention plan that is consistent with MST ideology and is responsible for the provision of clinical services. Therapists are responsible for "total care" of the family; resource acquisition and referrals for service are not emphasized. Interventions focus on the youth and his/her family, peer interaction, neighborhood/community support, and school/vocational performance. Peer assessment is also a crucial component of this model because of the understanding that peer relations can contribute to or prevent further client anti-social behavior (Henggeler, 1997). Burns et al. (2000) cites "decreasing a youth's association with deviant peers" as an important component of MST.

Service duration ranges from 3 to 5 months, involving an average of 60 hours of contact over 5 months. This program is typically staffed by a doctoral-level supervisor and master-level therapists with each therapist carrying 4 to 6 families. While staff is available 24 hours per day, 7 days per week, and can usually meet at the families' convenience, use of service between 10 p.m. and 8 a.m. is discouraged except in the event of an emergency (Henggeler, 1997).

Henggeler (1997) states that MST programs have a strong focus on program fidelity and emphasizes the importance of program fidelity in reference to successful outcomes. Fidelity measures are administered every six weeks to the clinician, caregiver, and adolescent to promote and monitor treatment adherence (Bums et al., 2000). In his 1998 text, *Multisystemic Treatment of Antisocial Behavior in Children and Adolescents*, Henggeler cites the importance of treatment provider training and supervision as paramount to adherence to the principles of MST and, thus, quality care, improved child and family functioning, and decreased recidivism. Henggeler cites three training and supervision guidelines that promote treatment fidelity.

1. Master's level therapists receive initial five day MST training.
2. Quarterly "booster" sessions that provide training in special topics such as marital therapy, treatment of parental depression, or early childhood intervention that contribute to the integrative nature of MST. These quarterly sessions also provide a setting for the discussion of particularly difficult cases.
3. Weekly group supervision that lasts for 1 to 2 hours provided by MST on-site supervisor.

Perhaps the strongest criticism of MST is the fact that most clinical trials studying the treatment model have been directed by one of the developers of MST. Three studies conducted by groups distal to MST developers are underway or have been completed and are discussed in the empirical research section .

## **Homebuilders**

Homebuilders was developed in Tacoma, Washington during the late 1970's. The goal of the program is to enable families to care for children who are at risk for unnecessary out-of-home placement (Alstein & McRoy, 2000). There is inconsistency in the literature in reference to the original ideology that provides the foundation for the Homebuilders model. Kinney, Madsen, Fleming, and Haapala (1977) cite crisis intervention, assertion training, fair fighting techniques, and behavior modification as core ideology and techniques. Pecora, Fraser, & Haapala (1990, pg. 6), state, "The Homebuilders program is based upon Rogerian, cognitive-behavioral, crisis, and ecological theories." Alstein and McRoy (2000) and Wells and Bigel (1991) specifically refer to a crisis intervention model as providing the original framework for Homebuilders.

The model is based upon home-based intensive intervention that calls for a six week to three-month intervention. Workers generally carry three to six cases and may be on call 24 hours a day. Intervention focuses upon client empowerment, skill building, and provision of concrete services, such as transportation (Forsythe, 1992). Consistent with the aforementioned nebulously defined guiding ideology, the specific treatment interventions and treatment provider qualifications of Homebuilders are also not clearly defined in the literature.

Forsythe (1992), however, has outlined 10 program characteristics and three goals of Homebuilders.

### Program Characteristics

1. Children are at imminent risk of unnecessary removal from their families.
2. Services are delivered in clients' homes.
3. The response is immediate, usually within 24 hours.
4. The service is very intensive, 2 to 20 hours per week.
5. Caseloads are small, sometimes only two families at a time.
6. The service is short term, 4 to 6 weeks.
7. There is highly flexible scheduling, with 24-hour, 7-days-a-week availability.
8. A blend of "hard" and "soft" services is offered.
9. The approach is "systemic", with an emphasis on interaction among family members and within the community.
10. Objectives are "limited" - to teach the family the skills to stay together safely, not to make "perfect" families.

### Program Goals

1. Safety of the child, family, worker, and community
2. Keeping the family together and avoiding placement
3. Improving the skills of family members so they will be better able to handle this and similar problems in the future

There has been much literature written about the ineffectiveness of "Family Preservation" and problems with treatment fidelity (Rubin, 1997; Wells & Biegel, 1992; Kelly & Blythe, 2000; Rossi, 1992). In these articles, however, "Family Preservation" is not clearly defined and while it may be assumed that Homebuilders is used as a conceptual framework, it is neither scholarly nor prudent to do so. There have been several studies completed which study the specific implementation of a Homebuilders model. These will be discussed in the empirical research section of this report.

## **Wraparound**

Elements of Wraparound have been present in various programs throughout North America since the 1960's (VanDenBerg & Grealish, 1996). This model of child and family service was developed in response to the limiting nature of categorical programs that serve children and families who have multiple needs and is associated with environmental ecology (Munger, 1998). Specifically, this model was developed to provide individualized services and supports for children and families with severe behavioral and emotional problems that have caused or place them at risk for out-of-home placement (Burns et al., 2000). Dennis, VanDenBerg, & Burchard (1992) have outlined the elements of the Wraparound process that guide the process, as well as providing a context for fidelity measurement. They are as follows:

1. Wraparound efforts must be based in the community.
2. Services and supports must be individualized to meet the needs of the children and families and not designed to reflect the priorities of the services systems.
3. The process must be culturally competent and build on the unique values, strengths, and social and racial make-up of children and families.
4. Parents must be included in every level of development of the process.
5. The process must be implemented on an inter-agency basis and be owned by the larger community.
6. Services must be unconditional. If the needs of the child and family change, the child are not to be rejected from services. Instead, services must be changed.
7. Outcomes must be measured.

According to VanDenBerg & Grealish (1996), the specific implementation of these elements involves the development of a community team, which ideally incorporates representatives from top levels of all major public and private agencies. Additionally, most community teams develop subcommittees that oversee the Wraparound process. It is through these subcommittees that referral is facilitated. Candidates for referral are often children and families in which the child is at risk out-of-home placement. A "resource coordinator" who is often a bachelors or higher-level staff with a knowledge of community resources, then collaborates with the family in a variety of tasks. It is not uncommon for these coordinators to be termed "case managers". Resource coordinators are typically bachelor's level practitioners and do not provide direct clinical care. Instead, local resources provide those services (Burns et al., 2000).

Frequency and duration of the implementation of Wraparound is determined by the individualized service and support plan that is created by the child, family, and resource

coordinator. Therefore, in direct contrast to the MST and Homebuilders, the delivery of Wraparound services is not to be "time-limited" in nature. Resource coordinators carry anywhere from only one family at a time to four to six (Burns et al., 2000).

According to VanDenBerg & Grealish (1996), Wraparound is still in the early stages of development and lacks quantitative studies regarding the efficacy of its implementation. In order to more fully elucidate the ideology and monitor the implementation of Wraparound, a fidelity measure has been developed and is currently being implemented in several locations (Bums & Hoagwood, 2002).

## **Case Management**

Case Management is an approach to service delivery that is characterized by varying definitions, components, and models of service. This section focuses on the national literature on case management, not the Kansas model. The roots of CM can be traced back to the Settlement Houses of the late 19<sup>th</sup> century in the United States, with different incarnations being applied to varying populations in the past 100 years. In reference to its use with children, Bums & Hoagwood (2002) cite the development of the Child and Adolescent Service System Program (CASSP) by the National Institute of Mental Health in 1984 as an impetus for the widespread use of CM with children who display serious emotional and behavioral disorders.

Because the development of Case Management is rather nebulous, it is only logical that its philosophical underpinnings and guidelines for implementation are not well defined in the literature. Burns & Hoagwood (2002) include Broffebrenner's ecology of human development, Bandura's self-efficacy and modeling theories, and Maslow's hierarchy of needs as ideologies that provide foundation for CM. In reference to implementation, Stroul (1995) identifies six common elements that influence varying forms of Case Management: assessment, service planning, service implementation, service coordination, monitoring/evaluation, and advocacy.

Within the context of this framework, it appears there is great variation in practical implementation. While states such as Kansas have successfully developed protocol and training for state wide implementation, no collectively accepted guiding ideology was found in the literature. In recent years, Case Management has branched into varying forms including Intensive Case Management, Targeted Case Management, and Crisis Case Management. The only clearly defined difference between these forms, other than their title, is the time-limited nature of Crisis Case Management.

Specifically with SED children, it has been documented that CM duration can range from weeks to years, with duration and frequency of service delivery within that time frame being dictated by client needs (Bums & Hoagwood, 2002) as well as the nature of the helping relationship. For example, a Crisis Case Manager may only work with a family for a matter of days or weeks, with their purpose being to support a family through a particularly difficult situation. This literature review indicates size of average caseload

per case manager varies as widely as duration statistics, with caseloads varying from 4 to 75 and up, again being dictated by the nature and purpose of the relationship. Educational requirements for "case managers" are also not well defined, but the consensus of the literature indicates an unspecified bachelor's degree is generally a prerequisite to serve in this capacity. In the state of Kansas, the frequency and duration of Targeted Case Management with SED children is determined by the family's needs, the average case load is 10-15 families, and case managers are usually bachelor's level practitioners whose focus is brokerage and/or community psychiatric support treatment.

Unfortunately, there are very few clinical trials that have been conducted in reference to CM with children and none addressing the efficacy of long-term Targeted Case Management. The findings of the studies that have been completed are relatively inconclusive regarding the efficacy of this model. While there is a research base that supports CM with SMPI adults (Chamberlain & Rapp, 1991; Rapp & Wintersteen, 1989), there is a significant paucity of research in reference to its application to children who are at risk of out-of-home placement.

It is important to note the term "case management", is sometimes referenced in the literature as process that takes place within the context of other interventions. Specifically, some Wraparound, MST, and Homebuilders programs reference the use of "case managers" or "case management services". For the purpose of this analysis, however, Case Management will be examined as an intervention independent of other service delivery approaches.

Table I – Description of Models

Model/Process	Designer/Location/Time	Staffing/Training	Caseload	Freq/Duration of Contact	Philosophical Basis	Target Population
Wraparound	-John VanDenBerg -Alaska -1980's	-Community Teams -Subcommittees -Coordinator/ "Case Manager"	As designed, often only one family, can be more	-Determined by needs/desires of family -No limitations	-Designed in response to limitations of categorical services	-Children and families with complex emotional needs
Homebuilders	-Kinney, Madsen, Fleming, Haapala -Tacoma, WA -1974	-Not well-defined -Assumed to be CPS/DFS/SRS workers	3-6 Families	-Workers on call 24/7 -6 weeks-3 mos	-Inconsistent in literature -Crisis Intervention -Ecological -Cog-Behav	-Children at risk for out of home placement
Multi-Systemic Therapy (MST)	-Scott Henegler -Early 1980's -University of South Carolina	-Master's level therapist with doctoral level supervision	4-6 Families	-Workers available 24/7, contact discouraged from 10p-8a -3-5 months	-Social Ecological/ Systems Theory	-Originally designed for Anti-Social youth, has since been applied to diverse pops
Targeted Case Management	-TCM with SED children became more common after 1984, when NIMH implemented CASSP (Children & Ado. Service System Program)	-Not well-defined or researched -Typically, bachelor's level practitioner	-Depends on needs of client, structure of program -Varies from 4 to 75 and up -In Kansas, usually 10-15	-Depends on client needs and structure of program -Can range from weeks to years	-Poorly defined in the literature -Ecological, Modeling, Strengths, and Empowerment are referenced	-Has been applied to numerous populations, including SED children and their families

## **OVERVIEW OF EMPIRICAL RESEARCH OF FOUR MODELS**

### **Multisystemic Therapy -(see also Table II , pp 14 & 15)**

To date, there have been at least 13 clinical trials involving MST that demonstrate the greatest variety of application to diverse populations and many of these studies include a component addressing treatment fidelity (Henggeler et al., 2002). The particular studies included in this analysis were chosen for their representation across time (earliest to most recent), large sample size, and/or inclusion of diversity of presenting issues.

With the exception of the earliest trials, treatment fidelity has been a heavily emphasized component of MST studies. It is important to note that the results of all MST studies have pointed toward this model as an effective intervention strategy. The study (#1) conducted by Henggeler et al. in 1986 did not involve random assignment, nor were follow-up measures utilized. Additionally, Henggeler et al. (1987) (#2) did not incorporate a follow-up component, but did utilize random assignment of subjects. These studies were included in this analysis because they represent the foundation of MST research. While Bourdin et al. (1990) (#3) completed a trial with a very small number of subjects, it was included in this project because it is indicative of the wide variety of emotional and behavioral problems to which MST has been applied. Studies 4, 5, & 6 included the application of MST to juvenile offenders through the use of large groups of subjects.

Of particular interest is a study discussed by Schoenwald et al. (2000) (#7) that involved a psychiatric, rather than juvenile offender population. Henggeler, Rowland, et al. (1999) also reported on this study. Youth were randomly assigned to home-based MST rather than hospitalization. A significant number of MST youth avoided hospitalization and the hospitalization group experienced double the days in out-of-home placement in comparison to the MST youths. It is important to note that the MST model was altered somewhat in this study. The changes included: increased therapist supervision, reduced caseloads to three families per therapist, and two bachelor's level crisis caseworkers added to assist therapists with clinical and administrative tasks.

Three independent evaluations of MST are in progress or have been completed. Thomas et al. (2002) described their project that involves prevention, early intervention, and treatment of antisocial youth and their families with the use of MST. The group has "recently completed the major data analysis and long-term outcomes for MST participants and are starting the report that will present those findings" (C. Thomas, personal communication, January 8, 2003).

In an unpublished paper, Miller (1998) examined recidivism and cost outcomes in a randomized trial (N=54) of Delaware juvenile offenders assigned to MST or detention. Miller found that "over time, MST was not significantly better than the alternative" (M. Miller, personal communication, January 7, 2003). Henggeler et al. (2002, pg. 214)

stated that this program "suffered significant implementation problems, with minimal treatment fidelity and 100% turnover of clinical staff." It appears this study was not well implemented and reinforces the importance of Henggeler's emphasis on treatment fidelity.

Finally, Lesheid et al. (2002) (#8) are studying the largest sample size of youth ever utilized in an MST trial (N=409). This randomized Canadian study, running from April 1997 and March 2001, compared the effectiveness of MST to "usual services" consisting of social and criminal justice services (i.e. outpatient psychotherapy and probation). The follow-up of criminal convictions continues until 2004 but interim results are currently being released. Lesheid et al. (2002, pg 4) state, "the MST group and the usual services group are not distinguishable on any outcome measure. The MST group has slightly better outcomes on about half of the indicators while the usual services group has slightly better outcomes on about half. No differences were statistically significant." The outcomes focused on criminal convictions and rates and lengths of custody sentences. Information about treatment fidelity has not been reported.

### **Homebuilders - (see also Table III , pp. 16 &17)**

Since 1977, there have been at least twenty studies involving Homebuilders (Alstein & McRoy, 2000), with the largest of these being the Putting Families First (Schuerman et al., 1994). There have been few Homebuilders studies that indicated this model produces results that are statistically significant from traditional community based services. The five specific clinical trials included in the table were chosen for their representation across time (earliest to most recent), large sample size, and/or comparative study design. The first four studies listed in Table III (#s 9, 10, 11, &12) did not find any statistically significant findings in favor of Homebuilders. Evans et al. (1997) (# 13) compared two different Homebuilders models with Crisis Case Management and found that the two Homebuilders models were more successful in helping families to make gains in family cohesion and social support and were equally effective in keeping children in the home.

As mentioned previously, there has been great concern regarding the fidelity of program implementation and a lack of clarity regarding ideology and intervention in programs claiming be based upon a Homebuilders model. In considering all of these dynamics in concert, perhaps it is not so much that this model is ineffective in reducing out-of-home placement, but has been implemented in ways that are inconsistent with the original intentions of its designers.

### **Wraparound - (see also Table IV, p. 18)**

According to Burns & Hoagwood (2002), the research base for Wraparound includes 15 studies, but only two involve random assignment, with the remainder being pre-post test designs and case studies for which there are no comparison groups examined. The two trials (# 14 & 15) that utilized an experimental design are included in this analysis. Evans et al. (1998) (# 14), however, utilized a very small sample of only 42. The Hyde et al. study (# 16) was included only because it is not a pre-post test design, nor a case study.

The findings of this study should be considered weak, however, because of confusing and ill-defined methodology. Presently, there are numerous fidelity projects and other efficacy studies underway.

Interestingly, the Evans et al. (1996) (# 14) study cited within the context of Wraparound appears to be the same Evans et al. (1994) (# 17) study cited in reference to Case Management. It is important to note that this study was reported in the literature as a trial that encouraged the pursuit of CM research, but it was also cited as support for continued Wraparound research, because the Family Centered Intensive Case Management utilized in the study was consistent with Wraparound ideology. Again, the lack of salient ideological development and clear operationalization of practice guidelines are evident.

### **Case Management (see also Table V, p. 19)**

Case Management has a very limited research base, probably due in part to the lack of development of ideological underpinnings and practice guidelines. Four published CM studies specifically relating to children with emotional or behavioral problems were located in the literature and while some researchers and practitioners see the results as encouraging, they are not definitively conclusive. Only three studies of the four published studies were included in this analysis because the fourth dealt specifically with homeless youth, a population outside the scope of this project.

One unpublished study (Ruffolo, 1999) cited by Burns & Hoagwood (2002) used a quasi-experimental design to compare two models of case management used in upstate New York. The SEE (support, education, and empowerment) Model, (N=56) served as the experimental component and youth intensive case management (N=38), a broker model of CM, was the control. According to Burns & Hoagwood (2002), "Both groups showed improvement in symptom and problem behavior over time; Experimental group improved more."

While the Evans et al. (1994) (#17) study indicated some positive results at 18 months post-treatment, CM did not demonstrate a statistically significant change in child functioning or parenting skills. Burns et al. (1996) (#18) did not compare CM to another intervention, they only examined differing ways of implementing case management. Evans et al. (1997) (#19) failed to show that Crisis Case Management families made similar gains in family cohesion and social support in comparison to Homebuilders models. Finally, the literature does not seem to indicate there are any CM studies in the planning stages or presently underway.

## SUMMARY/COMPARISON

While these four models differ in many respects, they obviously share some **similarities**: 1) The paramount goal of all these programs is to enable children to live safely in their homes, 2) they all take a positive view of the client system, 3) all avoid pathologizing the child and family, and 4) all work to connect the child and family to resources in their environment, although there is less emphasis on this in MST.

To summarize the **variations**, all four models vary to some degree in reference to 1) theoretical/philosophical foundation, 2) specificity of methods of clinical intervention, 3) specification of service provider credentials, 4) caseload size, 5) length of service provision, and 6) status of research base (including inclusion of fidelity measures).

Firstly, not only do the philosophical foundations of these models display some variation, they also differ in the extent to which they are developed and clarified. The guiding ideologies of CM and Homebuilders are not saliently outlined in the literature and suffer from inconsistent description, while the ideologies guiding MST and Wraparound are very clearly developed and delineated. Briefly, CM had been described as being based on Human Ecology, Bandura's Modeling Theory, Maslow's Hierarchy of Needs, and Strengths Perspective, among others (Bums and Hoagwood, 2002). The literature reports Homebuilders springing from crisis intervention theory, parent effectiveness training, Rogerian theory, cognitive-behavioral theory, and ecological theories. Fidelity measures are not available for either CM or Homebuilders. Conversely, MST is very clearly based upon systems theory and social ecology and has well developed fidelity measures. Wraparound shares a systemic ideology with MST, but its creators move beyond the categorical approach to service provision and stress the importance of tailoring services to families, not serving families within the context of pre-existing services. Wraparound fidelity measures are in development.

All four models vary in specificity of clinical intervention, specification of provider credential, length of service provision, caseload size, and length of service provision. As was outlined in the description of the models, CM and Homebuilders have little to no clarity in clinical intervention and provider credentials. On the other hand, the creators of MST have precisely defined types of clinical intervention and a high degree of service provider education and MST training. These two components of Wraparound may not be as clearly delineated as they are for MST, but the creators of Wraparound are quite clear that services, service providers, and frequency/duration of services are to be determined by the family and its needs, not by predetermined guidelines. Regarding caseload size and length of service, MST and Homebuilders are designated as short-term interventions with small (3-6) caseloads, while CM and Wraparound have undefined timeframes for service provision and either larger caseloads (CM) or unspecified caseloads (Wraparound).

The research base for Case Management is limited and relatively inconclusive. Additionally, the literature does not indicate that there are any clinical trials involving CM currently underway. Likewise, there do not appear to be any studies involving Homebuilders that are presently being undertaken. While there is a larger research base

for Homebuilders than for CM, it is also relatively inconclusive in reference to its efficacy. It is also important to note that treatment fidelity has been a documented problem for Homebuilders' studies and appears to have been problematic for CM trials.

Wraparound also has a very small research base, but there are several trials currently underway, with a specific emphasis on treatment fidelity. MST has, by far, the most positively conclusive research base. Many of the MST studies that have been conducted in the past 20 years have a fidelity component and, as was mentioned in the description of the model, this is a clear dynamic of MST implementation. As was also noted in the model description, one of the greatest criticisms of MST is the fact that its creators have been involved in most of the clinical trials examining its effectiveness. Preliminary results from two very recent, unpublished studies indicate no difference between MST and the control, but fidelity to the MST model was problematic in one study (Miller, 1998) and unreported in the other (Leschied, 2002).

Perhaps one of the most important observations drawn from this analysis is that there appears to be only one study (Evans et al., 1997) (#12) that compares any of these treatment approaches to any of the other three included in the report. Therefore, while each of these models/processes can be examined in isolation and in comparison to traditional community-based services, it is extremely difficult, if not impossible to draw conclusions about comparative efficacy of the models.

In closing, based solely on the descriptive aspects of the models, one could make choices regarding model implementation according to the type of target population served and intervention purpose. MST and Homebuilders are designed for juvenile offender and child welfare populations, respectively, to prevent placement through intensive, shortterm therapy. Case Management (with the exception of Crisis Case Management) and Wraparound are designed to provide long-term supports and services for SED populations. While there are no studies to confirm this in practice situations, short-term models, such as MST and Homebuilders, likely provide time-limited interventions, and clients are then referred to a program utilizing a long-term model, such as Wraparound or Case Management, for ongoing monitoring and support.

**Table II - Multisystemic Therapy:  
Empirical Studies**

Citation	Description of Study	Pertinent Findings
(#1) Henggeler, S.W., Rodick, J.D., Bourdin, C.M., Hanson, C.L., Watson, S.M., & Urey, J.R. (1986). Multisystemic treatment of juvenile offenders: Effects on adolescent behavior and family interactions. <i>Developmental Psychology</i> , 22, 132-141.	N= 124 juveniles – Quasi-experimental -57 delinquent juveniles received MST -23 delinquent juveniles received out-patient CMHC services -44 non-delinquent juveniles served as developmental controls -No follow-up, no random assignment	MST found to be “more effective than ‘usual community services’ in decreasing adolescent behavioral problems and improving family relations, especially communication and affect.”
(#2) Brunk, M., Henggeler, S.W., & Whelan, J.P. (1987). A comparison of multisystemic therapy and parent training in the brief treatment of child abuse and neglect. <i>Journal of Consulting and Clinical Psychology</i> , 55, 311-318.	N= 43 -Maltreating families were randomly assigned to MST (n=21) vs. clinic-based behavioral parent training (n=22). Each group received 1 ½ hours of therapy a week for 8 weeks. -No follow-up	Observational measures at post-treatment showed more effective parent control of child behavior and increased parent response to child’s behavior among MST group.
(#3) Bourdin, C.M., Henggeler, S.W., Blaske, D.M. & Stein, R. (1990). Multisystemic treatment of adolescent sex offenders. <i>International Journal of Offender Therapy and Comparative Criminology</i> , 35, 105-114.	N=16 – Adolescent sex offenders and their families were randomly assigned to MST vs. community-based out-patient counseling. MST, n=8. Out-patient, n=8.	At 3 year follow-up, MST clients had 1/6 the rate of re-arrest for sexual crime as the out-patient clients.
(#4) Henggeler, S.W., Melton, G.B., & Smith, L.A. (1992). Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders. <i>Journal of Consulting and Clinical Psychology</i> , 60, 821-833.	N=84 – Juvenile offenders and their families randomly assigned to MST (n=43) vs. Dept. of Youth Services (probation, monitoring of school attendance, referral to community agencies, n=41). Frequency and duration of DYS was not specified.	-59 week follow-up -MST youth had approximately ½ as many arrests as DYS youth -MST families reported more cohesion, DYS families reported decreased cohesion -At 2.4 year follow-up, twice as many DYS youth had re-offended.
(#5) Bourdin, C.M., Mann, B.J., Cone, L.T., Henggeler, S.W., Fucci, B.R., Blaske, D.M., & Williams, R.A. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. <i>Journal of Consulting and Clinical Psychology</i> , 63, 569-578.	N=176 – Juvenile offenders and their families randomly assigned to MST (n=92) vs. community-based individual therapy (IT) (n=84). IT was based upon psychodynamic, client-centered, and behavioral techniques that specifically focused on the adolescent, not upon systems surrounding the adolescent. Frequency and duration were not specified, but the mean hours of treatment for MST was 23.9, while for IT the mean was 28.6.	-At treatment conclusion, MST families reported increased cohesion/adaptability (IT families reported decreased cohesion/adaptability), and improved family supportiveness (IT families reported decreased supportiveness). -No treatment effects observed for either group in reference to peer relations. -At four year follow-up, MST youth had a recidivism rate less than 1/3 of that for IT.

<p>(#6) Henggeler, S.W., Melton, G.B., Brondino, M.J., Scherer, D.G., &amp; Hanley, J.H. (1997). Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity. <i>Journal of Consulting and Clinical Psychology, 65</i>, 821-833.</p>	<p>n=155 – Chronic juvenile offenders and their families were randomly assigned to MST (n=82) versus usual juvenile justice services (n=73). Usual juvenile justice services included a six-month program of probation, monitoring of school attendance, referral to out-patient therapy, A&amp;D services.</p>	<p>-Decreased psychiatric symptomatology reported by MST youth at post-treatment. -Treatment effects were not observed in either group in reference to family relations or peer relations.</p>
<p>(#7) Schoenwald, S.K., Ward, D.M., Henggeler, S.W., &amp; Rowland, M.D. (2000). Multisystemic therapy versus hospitalization for crisis stabilization of youth: Placement outcomes 4 months post-referral. <i>Mental Health Services Research, 2</i>, 3-12. Henggeler, Rowland, et al. (1999) also reported on this study.</p>	<p>N=113 – Youth were randomly assigned to home-based MST (n=57) vs. hospitalization (n=56) for psychiatric stabilization and analyzed 4 months post-approval for hospital services. -No follow-up beyond four months -MST model was altered for this study. Caseload size was decreased to three families per therapist, therapist supervision was increased, and crisis caseworkers were made available to the therapists.</p>	<p>-In a significant proportion of MST youth, hospitalization was avoided and the reduction of hospital use was not offset by the use of other out-of-home services. Youth in the hospitalization groups experienced double the days in out-of-home placement in comparison to MST youths.</p>
<p>(#8) Leschied, A.W. (2002). Randomized Field Trial of Multisystemic Therapy for Serious Young Offenders in Ontario, 1997-2001. <a href="http://www.lfcc.on.ca/mstoverview.html">http://www.lfcc.on.ca/mstoverview.html</a>.</p>	<p>N=409 –Youth were randomly assigned to MST or probation. (Have access only to preliminary findings, study is not yet published. Number not broken down into group assignment.) Convictions by youth were measured six months, one, two, and three years post-treatment. Follow-up continuing until 2004.</p>	<p>-MST and probation group were not distinguishable on any outcome measure. MST had slightly better outcomes on about half the indicators. No differences were statistically significant. Level of treatment fidelity not reported.</p>

**Table III – Homebuilders:  
Empirical Studies**

Citation	Description of Study	Pertinent Findings
<p>(#9) Kinney, J.M., Madsen, B., Fleming, T., &amp; Haapala, D.A.(1977). Homebuilders: Keeping families together. <i>Journal of Consulting and Clinical Psychology</i>, 45 (4), 667-673.</p>	<p>N=80 families (121 family members) tracked during first 16 months of Homebuilders implementation in Tacoma -one of the first studies investigating in-home services -no comparison group(s)</p>	<p>-At end of 16 months, 97% (117/121) of family members had avoided placement in an institutional setting.</p>
<p>(#10) Schwartz, I.M., AuClaire, P., &amp; Harris, L.J. (1990). Family preservation services as an alternative to the out-of-home placement of adolescents: The Hennepin County experience. In <i>Family Preservation Services</i>, Wells, K. &amp; Biegel, D. (Eds.). Newbury Park, CA: Sage Publications.</p>	<p>N=116 – 58 children unsystematically assigned to home-based service unit (treatment group) and 58 children randomly selected to serve as comparison group, who were served by foster homes, hospitals, group homes, and residential treatment centers. -no true random design -variation in sample time duration -no follow-up</p>	<p>-At post-treatment, a statistically significant difference in rate of out-of home placement was not found between the two groups.</p>
<p>(#11) Feldman, L. (1990). Evaluating the impact of intensive family preservation services in New Jersey. In <i>Family Preservation Services</i>. Wells, K. &amp; Biegel, D. (Eds.). Newbury Park, CA: Sage Publications.</p>	<p>N=183 families with children “at risk of placement” were randomly assigned to Homebuilders group (n=96) or traditional service group (mental health agency, DYFS monitoring, n=87). Frequency/duration of traditional services not specified.</p>	<p>-At conclusion of services (appx. 6 weeks), a statistically significant difference was not found between the rates of out-of-home placement between the groups. This was observed again at 12 months post-tx.</p>
<p>(#12) Schuerman, J.R., Rzepniki, T.L., Littell, J.H. (1994). <i>Putting families first: An experiment in family preservation</i>. New York, New York: Walter de Gruyter, Inc.</p>	<p>A three tiered study investigating Illinois placement prevention program. Tier 1 – n= 6,522 families – descriptive data collected Tier 2 – n=1,564 families – randomized placement to Family First (based on Homebuilders ideology) (n=995) or CPS services (specific services varied by location, n=569) Tier 3 – n=278 parents – longitudinal study</p>	<p>-“Families in experimental group (Tier 2) received much more in the way of services than those is the regular services group.....the Family First program did not result in a statistically significant reduction in placements or subsequent child maltreatment in comparison to regular services.”</p>

<p>(#13) Evans, M.E., Boothroyd, R.A., &amp; Armstrong, M.I. (1997). Development and implementation of an experimental study of the effectiveness of intensive in-home crisis services for children and their families. <i>Journal of Emotional and Behavioral Disorders</i>, 5, 93-105.</p>	<p>N=238 – Psychiatrically hospitalized children were randomly assigned post-discharge to a Homebuilders Program (HBCI, n= 90), an Enhanced Homebuilders Program (HBCI+, n=85), or Crisis Case Management (CCM, n=63).</p>	<p>-CCM families failed to show the same gains in family cohesion and social support as the HBCI &amp; HBCI+ families, but CCM was as successful as the other two interventions at keeping the child in the home.</p>
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**Table IV – Wraparound:  
Empirical Studies**

Citation	Description of Study	Pertinent Findings
<p>(#14) Evans, M.E., Armstrong, M.I., Kuppinger, A.D. (1996). Family-centered intensive case management: A step toward understanding individualized care. <i>Journal of Child and Family Studies</i>, 5(1), 55-65.</p>	<p>N=42 -Children were randomly assigned to Family-Based Treatment (treatment foster care) n=15 or Family Centered Intensive Case Management (consistent with Wraparound ideology) n=27. Mean length of treatment for FCICM was 216 days, while the mean length of time in FBT was 411 days.</p>	<p>-At one year follow-up children in FCICM showed significant improvement in behavior, mood, and emotions and role performance, while the FBT children did not. -There was no significant difference in family adaptability or cohesion for either group. -The difference in one-year data between the groups was not significant.</p>
<p>(#15) Clark, H., Prange, M., Lee, B., Stewart, E., McDonald, B., &amp; Boyd, L. (1998). An individualized wraparound process for children in foster care with emotional/behavioral disturbances: Follow-up findings and implications from a controlled study. In M.E. Epstein, K. Kutash, &amp; A. Duchnowski (Eds.), <i>Outcomes for children and youth with behavioral and emotional disorders and their families: Programs and evaluation best practices</i> (pp.513-542). Austin, TX: Pro-Ed Publishing.</p>	<p>N= 131 – Children placed in foster care were randomly assigned to Fostering Individualized Assistance Program (FIAP – based upon Wraparound ideology, n=54) or Standard Practices Groups (SP, n= 77). “Standard Practices” was not clearly defined, nor were the frequency and duration of services. - “The children of both groups were exposed to the care and treatment practices that were usual to foster care, with the FIAP groups receiving intensive case management and services.”</p>	<p>-FIAP increased permanent placements, decreased restrictiveness of living environment, improved behavioral adjustment, and improved school adjustment as compared to SP.</p>
<p>(#16) Hyde, K., Burchard, J., &amp; Woodworth, K. (1996). Wrapping services in an urban setting. <i>Journal of Child and Family Studies</i>, 5, 67-82.</p>	<p>N=106 – Quasi-experimental involving 4 groups. One group received Wraparound after returning from residential placement (WR, n=25), one group who was at risk for out-of-home placement and received Wraparound (WD, n=24), one group returned from residential placement but did not receive Wraparound but did receive traditional community based services (PW, n=18), and one group who returned from residential treatment and did not receive Wraparound services or traditional services (NW, n=18) -no true comparison groups -Traditional, standardized measures were not used – “community adjustment levels” were used, instead.</p>	<p>-50% of youth in Wraparound groups were rated as functioning at a “good” level, as described by the “community adjustment levels”. This can be interpreted to mean that these children were living in the community where they were attending school or working on a regular basis and engaging in relatively low rates of harmful behavior.</p>

**Table V - Case Management:  
Empirical Studies**

Citation	Description of Study	Pertinent Findings
<p>(#17) Evans, M.E., Armstrong, M.I., Dollard, N., Kuppinger, A.D., Huz, S., &amp; Wood, V.M. (1994). Development of an evaluation of treatment foster care and family-centered intensive case management in New York. <i>Journal of Emotional and Behavioral Disorders</i>, 2, 228-239. (Same as study # 14.)</p>	<p>N=42 – Families were randomly assigned to Family-Centered Intensive Case Management (FCICM, n=27) or a treatment foster care program, Family-Based Treatment (FBT, n=15). -FCICM children remained with their families (average length of service was 216 days), while FBT children were placed in foster care (average of 411 days).</p>	<p>-FCICM children showed more positive outcomes in role performance, behavior, overall functioning, externalizing behavior, internalizing behavior, thought problems and social problems. -At 18 months, neither group demonstrated statistically significant changes in functioning or parenting skills.</p>
<p>(#18) Burns, B.J., Farmer, E.J., Angold, A., Costello, E.J., &amp; Behar, L. (1996). A randomized trial of case management for youths with serious emotional disturbance. <i>Journal of Clinical Child Psychology</i>, 25, 476-486.</p>	<p>N=167 – Families were randomly assigned to treatment team with case manager (experimental, n=82) or treatment team with primary therapist as case manager (control, n=85).</p>	<p>-Families in experimental group reported less days of hospitalization, greater use of community services, and greater satisfaction than did families in control group.</p>
<p>(#19) Evans, M.E., Boothroyd, R.A., &amp; Armstrong, M.I. (1997). Development and implementation of an experimental study of the effectiveness of intensive in-home crisis services for children and their families. <i>Journal of Emotional and Behavioral Disorders</i>, 5, 93-105. (Repeat of study # 13.)</p>	<p>N=238 – Psychiatrically hospitalized children were randomly assigned post-discharge to a Homebuilders Program (HBCI, n= 90), an Enhanced Homebuilders Program (HBCI+, n=85), or Crisis Case Management (CCM, n=63).</p>	<p>-CCM families failed to show the same gains in family cohesion and social support as the HBCI &amp; HBCI+ families, but CCM was as successful as the other two interventions at keeping the child in the home.</p>

## REFERENCES

- Adoption Assistance and Child Welfare Act of 1980, P.L. 96-272, 42 U.S.C.
- Alstein, H. & McRoy, R. (2000). *Does family preservation really serve a child's best interest?* Washington, D.C.: Georgetown University Press.
- Bourdin, C.M., Henegler, S.W., Blaske, D.M. & Stein, R. (1990). Multisystemic treatment of adolescent sex offenders. *International Journal of Offender Therapy and Comparative Criminology*, 35, 105-114.
- Bourdin, C.M., Mann, B.J., Cone, L.T., Henggeler, S.W., Fucci, B.R., Blaske, D.M., & Williams, R.A. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology*, 63, 569-578.
- Brunk, M., Henggeler, S.W., Whelan, J.P. (1987). A comparison of multisystemic therapy and parent training in the brief treatment of child abuse and neglect. *Journal of Consulting and Clinical Psychology*, 55, 311-318.
- Burns, B.J., Farmer, E.J., Angold, A., Costello, E.J., & Behar, L. (1996). A randomized trial of case management for youths with serious emotional disturbance. *Journal of Clinical Child Psychology*, 25, 476-486.
- Burns, B.J., Schoenwald, S.K., Burchard, J.D., Faw, L., & Santos, A.B. (2000). Comprehensive community-based interventions with youth with severe emotional disorders: Multisystemic therapy and the wraparound process. *Journal of Child and Family Studies*, 9(3), 283-314.
- Burns, B.J. & Hoagwood, K. (2002). *Community treatment for youth*. New York, NY: Oxford University Press.
- Chamberlain, R. & Rapp, C.A. (1991). A decade of case management: A methodological review of outcome research. *Community Mental Health Journal*, 27(3), 171-187.
- Clark, H., Prange, M., Lee, B., Stewart, E., McDonald, B., & Boyd, L. (1998). An individualized wraparound process for children in foster care with emotional/behavioral disturbances: Follow-up findings and implications from a controlled study. In M.E. Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with behavioral and emotional disorders and their families Programs and evaluation best practices* (pp.513-542). Austin, TX: Pro-Ed Publishing.
- Evans, M.E., Armstrong, M.I., Kuppinger, A.D. (1998). Family-centered intensive case management: A step toward understanding individualized care. *Journal of Child and Family Studies*, 5(1), 55-65.
- Evans, M.E., Armstrong, M.I., Dollard, N., Kuppinger, A.D., Huz, S., & Wood, V.M. (1994). Development of an evaluation of treatment foster care and family-centered intensive case management in New York. *Journal of Emotional and Behavioral Disorders*, 2, 228-239.
- Evans, M.E., Boothroyd, R.A., & Armstrong, M.I. (1997). Development and implementation of an experimental study of the effectiveness of intensive in-home crisis services for children and their families. *Journal of Emotional and Behavioral Disorders*, 5, 93-105.
- Feldman, L. (1990). Evaluating the impact of intensive family preservation services in New Jersey. In *Family Preservation Services*. Wells, K. & Biegel, D. (Eds.). Newbury Park, CA: Sage Publications.
- Forsythe, P. (1992). Homebuilders and family preservation. *Children and Youth Services Review*, 14, 37-47.

- Hartman, A. (1993). Family preservation under attack. *Social Work, 38*(5), 509-512.
- Henggeler, S.W., Melton, G.B., Brondino, M.J., Scherer, D.G., & Hanley, J.H. (1997). Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity. *Journal of Consulting and Clinical Psychology, 65*, 821-833.
- Henggeler, S.W., Melton, G.B., Smith, L.A. (1992). Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders. *Journal of Consulting and Clinical Psychology, 60*, 821-833.
- Henggeler, S.W., Rodick, J.D., Bourdin, C.M., Hanson, C.L., Watson, S.M., Urey, J.R. (1986). Multisystemic treatment of juvenile offenders: Effects on adolescent behavior and family interactions. *Developmental Psychology, 22*, 132-141.
- Henggeler, S.W., Rowland, M.R., Randall, J., Ward, D., Pickrel, S.G., Cunningham, P.B., Miller, S.L., Edwards, J.E., Zealberg, J., Hand, L. & Santos, A.B. (1999). Home-based multi-systemic therapy as an alternative to the hospitalization of youth in psychiatric crisis: Clinical outcomes. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 1331-1339.
- Henggeler, S.W., Schoenwald, S.K., Bourdin, C.M., Rowland, M.D., Cunningham, P.B. (1998) Multisystemic treatment of antisocial behavior in children and adolescents. New York, New York: The Guilford Press.
- Hyde, K., Burchard, J., & Woodworth, K. (1996). Wrapping services in an urban setting. *Journal of Child and Family Studies, 5*, 67-82.
- Kelly, S & Blythe, B.J. (2000). Family preservation: A potential not yet realized. *Child Welfare, LXXIX* (1), 29-42.
- Kinney, J.M., Haapala, D.A., & Booth, C. (1991). *Keeping families together, The HomeBuilders model*. Hawthorne, NY: Aldine de Gruyter.
- Kinney, J.M., Madsen, B., Fleming, T., & Haapala, D.A. (1977). Homebuilders: Keeping families together. *Journal of Consulting and Clinical Psychology, 45* (4), 667-673.
- Kutash, K. & Rivera, V.R. (1996). *What works in children's mental health services? Uncovering answers to critical questions*. Baltimore: Paul H. Brookes.
- Munger, R.L. (1998). *The ecology of troubled children*. Cambridge, MA: Brookline Books.
- Pecora, P.J., Fraser, M.W. & Haapala, D.A. (1990). Client outcomes and issues for program design. In *Family Preservation Services*. Wells, K. & Biegel, D. (Eds.). Newbury Park, CA: Sage Publications.
- Rapp, C.A. & Wintersteen, R., (1989). The strengths model of case management: Results from twelve demonstrations. *Psychosocial Rehabilitation Journal, 13*(1), 22-32.
- Ronnau, J & Sallee, A.L. (1993). *Towards a definition of family preservation: Approach, model, or policy?* Las Cruces, NM: Department of Social Work, New Mexico State University.
- Rossi, P.H. (1992). Assessing family preservation programs. *Children and Youth Services Review, 14*, 77-97.
- Rubin, P. (1997). The family preservation evaluation from hell: Implications for program evaluation fidelity. *Children and Youth Services Review, 19*(1/2), 77-99.

Ruffolo, M.C. (1999). Preliminary data analysis for the R29 grant. Unpublished report. Ann Arbor, MI: University of Michigan: Author.

Schoenwald, S.K., Ward, D.M., Henggeler, S.W., & Rowland, M.D. (2000). Multisystemics therapy versus hospitalization for crisis stabilization of youth: Placement outcomes 4 months post-referral. *Mental Health Services Research, 2*, 3-12.

Schuerman, J.R., Rzepniki, T.L., Littell, J.H. (1994). *Putting families first.- An experiment in family preservation*. New York, New York: Walter de Gruyter, Inc.

Schwartz, I.M., AuClaire, P., & Harris, L.J. (1990). Family preservation services as an alternative to the out-of-home placement of adolescents: The Hennepin County experience. In *Family Preservation Services*. Wells, K. & Biegel, D. (Eds.). Newbury Park, CA: Sage Publications.

Stroul, B.A. (1995). Case management in a system of care. In B.J. Friesen & J. Poertner (Eds.), *From case management to service coordination for children with emotional, behavioral, or mental disorders: Building on family strengths* (pp.3-25). Baltimore: Paul H. Brookes.

VanDenBerg, J.E. & Grealish, E.M. (1996). Individualized services and supports through the wraparound process: Philosophy and procedures. *Journal of Child and Family Studies, 5*(1), 7-21.

Wells, K & Biegel, D.E. (Eds.) (1990). *Family preservation services*. Newbury Park, CA: Sage Publications.

Wells, K & Biegel, D. (1992). Intensive family preservation services research: Current status and future agenda. *Social Work Research & Abstracts, 25*(1), 21-27.