

EVIDENCE-BASED
PRACTICES

KIT

Knowledge Informing Transformation

Guide to EBPs

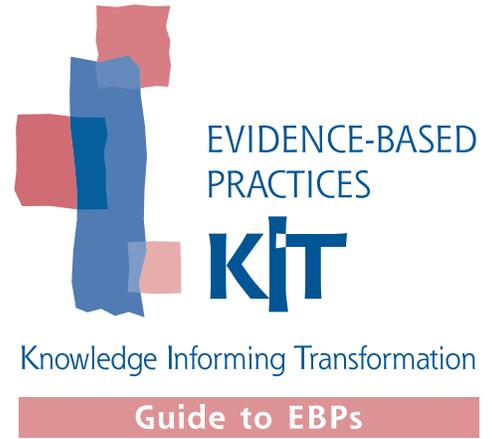
Selecting Evidence-Based Practices

For Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

Interventions for Disruptive Behavior Disorders



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
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Acknowledgments

This document was produced for the Substance Abuse and Mental Health Services Administration (SAMHSA) by Abt Associates, Inc., and the National Association of State Mental Health Program Directors (NASMHPD) Research Institute (NRI) under contract number 280-2003-00029 with SAMHSA, U.S. Department of Health and Human Services (HHS). Sylvia Fisher and Pamela Fischer, Ph.D., served as the Government Project Officers.

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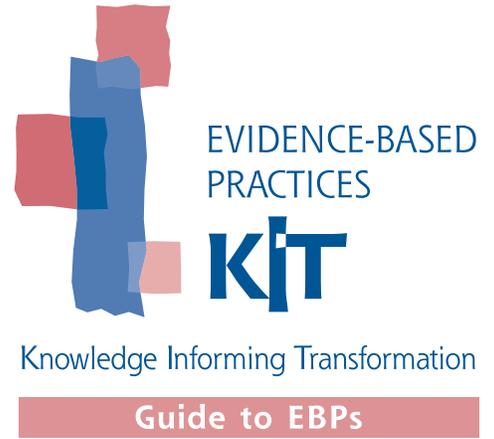
Recommended Citation

Substance Abuse and Mental Health Services Administration. *Interventions for Disruptive Behavior Disorders: Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking*. HHS Pub. No. SMA-11-4634, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, 2011.

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HHS Publication No. SMA-11-4634
Printed 2011



Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

This booklet provides a comprehensive, step-by-step guide to making decisions about implementing evidence-based practices (EBPs). It walks readers through the process of considering EBPs and matching them with the needs of communities, agencies, families, and youth. It also presents critical information that will help readers understand and use scientific evidence when choosing a practice.

Interventions for Disruptive Behavior Disorders

For additional references on interventions for disruptive behavior disorders, see the booklet, *Evidence-Based and Promising Practices*.

This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of the Interventions for Disruptive Behavior Disorders KIT, which includes six booklets:

How to Use the Evidence-Based Practices KITs

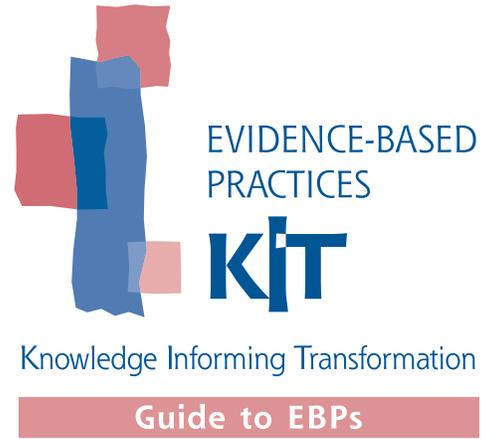
Characteristics and Needs of Children with Disruptive Behavior Disorders and Their Families

Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

Implementation Considerations

Evidence-Based and Promising Practices

Medication Management



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**Interventions
for Disruptive
Behavior
Disorders**

Selecting EBPs

Introduction to the Six-Step Decisionmaking Process

This booklet walks readers through the process of considering EBPs and matching them with the needs of communities, agencies, families, and youth. It also presents critical information that will help readers understand and use scientific evidence when choosing a practice.

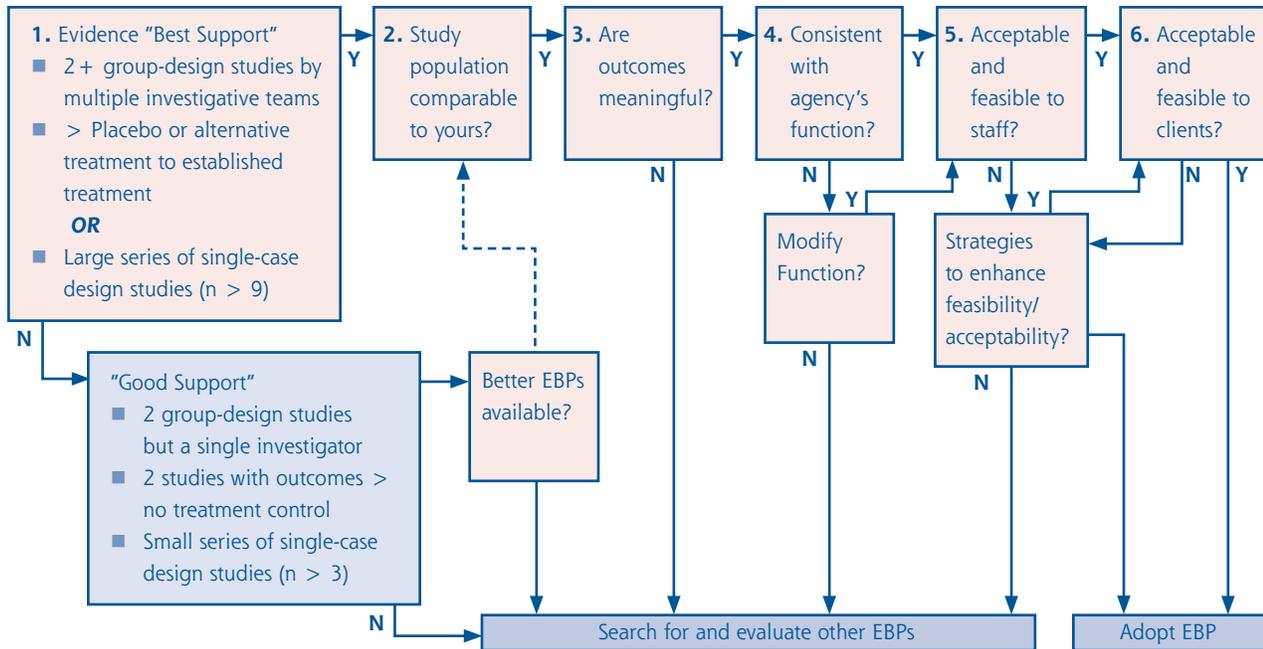
The information available for each of the 18 EBPs defined in Tables 3 and 4 of *How to Use the Evidence-Based Practices KITs* can be overwhelming. Even after educating yourself about the details of each EBP, deciding which EBP to implement in an organization and how to implement that EBP can be daunting. To help you in the selection process, this booklet gives you examples of implementation factors to be considered at each step in the decisionmaking process. Characteristics of the EBPs that influence decisionmaking are also summarized.

This booklet can serve as a shortcut for indepth browsing through the 18 EBPs presented in *Evidence-Based and Promising Practices* of this KIT to narrow the search to match your population of interest, your agency, and your staff and, most important, to satisfy the needs of families and children served. Figure 1 presents the six steps in selecting a specific EBP or set of EBPs to add to a service array:

- Determining the evidence for the EBP;
- Determining the target population of the EBP;
- Determining if the outcomes of the EBP are meaningful to a local population;



Figure 1: Decisionmaking in the selection of evidence-based practices



Adapted from *Selecting an evidence-based practice* (pp. 1-15), by P. A. Areán and A. Gum, in S. E. Levkoff, H. Chen, J. E. Fisher, & J. S. McIntyre (Eds.), *Evidence-based behavioral health practices for older adults*, 2006, New York, NY: Springer. Copyright 2006 by Springer.

- Determining if the practice is consistent with an agency's function;
- Determining if implementation is feasible to staff; and
- Determining if the EBP is acceptable to clients.

Specific characteristics of the individual EBPs are presented in the tables in this booklet. The decisionmaking process for selecting an EBP entails matching characteristics found in these tables with the process illustrated in Figure 1.

Tables 1A and 1B and all of the summary tables that follow are organized into the following two groups:

- EBPs that focus primarily on *prevention*; and
- EBPs that focus on *intervention*.

The prevention EBPs are also described in the table headings as *Prevention/Multilevel* because many have program components aimed at different levels of prevention. For example, some prevention programs are considered to be *universal* because they focus on an entire population to prevent disruptive behavior disorders. Examples of such programs could be outreach or media programs.

Several other prevention programs are called *selected* because they focus on a specific subpopulation to improve behavior problems that could turn into disruptive behavior disorders among that group of youth. Still others, labeled *indicated*, provide treatment or intervention as well as prevention services.

Intervention usually refers to the treatment of a specific disorder, as opposed to the *prevention* of a problem condition.

Tables 1A and 1B show the level of evidence for each EBP and the age, gender, and race/ethnicity of the children and adolescents who participated in the evaluation of the practice. For example, Table 1A shows that Project ACHIEVE is a multi-level prevention program that has a moderate level of

evidence to support its effectiveness. Project ACHIEVE has been evaluated with boys and girls 3 to 14 years of age. Approximately half of the children who participated in the evaluations were White, and half were from diverse populations, primarily African American.

Table 1A: What is the Level of Evidence for an EBP and is the Population Comparable to Yours? — Intervention EBPs

	Level of Evidence	Age Range	Gender		Race and Ethnicity*
			Boys	Girls	
Triple P-Positive Parenting Program	Good support	0–16	B and G		Groups of children and families in Australia who were primarily White. One randomized controlled trial was conducted in China with Chinese children.
Project ACHIEVE	Moderate support	3–14	B and G		Evaluation was carried out with groups who were approximately half White and half from diverse populations, primarily African American.
Second Step	Good support	4–14	B and G		Diverse groups studied: Two studies were conducted primarily with White children. In another two studies, the population was primarily African American. In one study the proportions of White, African American, and Hispanic participants were approximately equal. In another study, the majority of participants were African American and secondarily, Hispanic. Another study included a small percentage of Asian Americans; and one study was conducted in Germany.
Promoting Alternative Thinking Strategies	Good support	5–12	B and G		Groups studied were approximately one-half White and one-quarter to one-third African American. Asian American, American Indian, and Hispanic children combined made up the remainder of the group
First Steps to Success	Moderate support	5–6	B and G		The children involved in two studies were primarily White. Smaller case studies involved primarily African American and some American Indian children with minimal participation from Hispanic children.
Early Risers: Skills for Success	Good support	6–12	B and G		Evaluations included two groups of predominately White children and one group of predominately African American children.
Adolescent Transitions Program	Good support	11–18	B and G		Two studies included primarily White children. One study involved primarily White and African American children with very small proportions of Hispanics, Asian Americans, and American Indians.

* See *Evidence-Based and Promising Practices* for more information about the race/ethnicity of the children and adolescents who participated in the individual research studies, which established the effectiveness of the EBPs.



**Table 1B: What is the Level of Evidence and is the Population Comparable to Yours?
— Intervention EBPs**

	Level of Evidence	Age Range	Gender		Race and Ethnicity*
			Boys	Girls	
Incredible Years	Good support	2–12	B and G		Four studies have had primarily White participants with no description of other ethnic/racial groups. Two studies included African American, Hispanic and other multiethnic groups in small proportions.
Helping the Noncompliant Child	Moderate support	3–8	B and G		No specification of ethnicity or race among the studied groups was available.
Parent-Child Interaction Therapy	Good support	2–7	B and G		One study included approximately three-fourths White and one-fourth diverse populations (primarily African American). There is support for a culturally sensitive adaptation for Puerto Rican and Mexican American families.
Parent Management Training—Oregon	Best support	4–12	B and G		Evaluated primarily on White children and parents. A culturally sensitive adaptation of PMTO for Hispanic families has been evaluated as well.
Brief Strategic Family Therapy™	Good support	6–18	B and G		Evaluated primarily with Hispanic families. One study's sample was one-fifth African American.
Problem-Solving Skills Training	Good support	6–14	B and G		Studies with groups of approximately three-fourths White and one-fourth African American children.
Coping Power	Good support	9–11	B and G		Groups studied were approximately half White and half African American children. One study was in the Netherlands with Dutch children.
Mentoring	Moderate support	6–18	B and G		The major study included a group of approximately three-fourths African American children and one fourth Hispanic children.
Multisystemic Therapy	Best support	12–18	B and G		Most groups that were evaluated were approximately 60% African American children and 40% White children, except for two that were approximately 70% White and 30% African American. One study included an 84% multiracial group of African American and Whites. One study was conducted in Norway with Norwegian children.
Functional Family Therapy	Good Support	11–18	B and G		Groups were predominantly White families. In unpublished studies, diverse populations (primarily African American and Hispanic) comprised between one fourth and one half of the group. One study was conducted in Sweden.
Multidimensional Treatment Foster Care	Good Support	3–18	B and G		Studies were primarily White children. African American, Hispanic and American Indian children were represented in very small proportions.

* See *Evidence-Based and Promising Practices* for more information about the race/ethnicity of the children and adolescents who participated in the individual research studies, which established the effectiveness of the EBPs.

Finally, while this KIT focuses on matching EBPs with the needs of children, youth, and families and the needs of organizations serving them, consider the context in which programs are run. Evidence

shows that implementing an EBP program within a framework of continuous quality improvement (CQI) has benefits for all concerned.

EBPs and continuous quality improvement

Results of state demonstration projects show that implementing EBPs in organizations within a framework of continuous quality improvement (CQI) has several benefits:

- It builds momentum to get a project off the ground;
- It creates the organizational traction needed to achieve broader dissemination of the EBP around the state; and
- It can provide the justification for sustaining the project.

Continuous quality improvement principles focus on five areas:

- Customer and other stakeholder satisfaction with the quality and outcomes of services;
- Employee and customer empowerment to identify problems, identify opportunities for improved care, and take necessary action;
- The identification of organizational processes and systems, not individuals, as the source of problems;
- The use of structured problem-solving approaches based on data analysis; and
- The use of inclusive cross-functional teams (Shortell et al., 1995).

In a CQI framework, the needs of the child and family are comprehensively assessed and carefully matched with services and treatments. Outcomes are routinely monitored to ensure that the services and treatments are producing the desired results. Efforts to improve and enhance services and treatments are implemented as needed to improve outcomes for children and families.



Step 1 What is the evidence for a practice?

The first step shown in Figure 1 is to determine how much evidence supports an intervention. As examples, two categories are in the left boxes: *Best Support* and *Good Support*. Other levels of support are also possible. Generally, a higher level of evidence is desirable.

This booklet uses Hawaii's system of rating EBPs, because it is based on the criteria used by the American Psychological Association but integrates a broader range of evidence, with five categories:

- Best support;
- Good support;
- Moderate support;
- Minimal support; and
- Known risks.

Categories are based on the type and amount of rigorous scientific study that a practice has undergone. The following outline presents the criteria of the system's ratings. Find the ratings with explanatory material at <http://hawaii.gov/health/mental-health/camhd/library/pdf/ebs/ebs011.pdf>.

The EBPs covered in the KIT have levels of evidence of at least *moderate support*, while most have *good support*. Using Hawaii's system of rating, see that most interventions in Tables 1A and 1B are at the second level because they have undergone rigorous testing but only by one group of researchers. In other words, separate, independent researchers have not replicated the findings, either because no independent research studies have been completed or because independent studies did not confirm the results of earlier studies.

Criteria for level of evidence (Hawaii EBP Services Committee, 2004)

Level 1: Best Support

- I. At least two good between-group design experiments demonstrating efficacy in one or more of the following ways:
 - a. Superior to pill placebo, psychological placebo, or another treatment
 - b. Equivalent to an already established treatment in experiments with adequate statistical power (about 30 per group; cf. Kazdin & Bass, 1989)

OR

- II. A large series of single case design experiments ($n > 9$) demonstrating efficacy. These experiments must have:
 - a. Used good experimental designs
 - b. Compared the intervention to another treatment as in I.a.

AND

Further criteria for both I and II:

- II. Experiments must be conducted with treatment manuals.
- III. Characteristics of the client samples must be clearly specified.
- IV. Effects must have been demonstrated by at least two different investigators or teams of investigators.

Criteria for level of evidence (Hawaii EBP Services Committee, 2004)

Level 2: Good Support

- I. Two experiments showing the treatment is superior (statistically significantly) to a waiting-list control group. Manuals, specification of sample, and independent investigators are not required.

OR

- II. One between-group design experiment with clear specification of group, use of manuals, and demonstrating efficacy by either:
 - a. Superior to pill placebo, psychological placebo, or another treatment
 - b. Equivalent to an already established treatment in experiments with adequate statistical power (about 30 per group; cf. Kazdin & Bass, 1989)

OR

- III. A small series of single case design experiments ($n > 3$) with clear specification of group, use of manuals, good experimental designs, and compared the intervention to pill or psychological placebo or to another treatment.

Level 3: Moderate Support

- I. One between-group design experiment with clear specification of group and treatment approach and demonstrating efficacy by either:
 - a. Superior to pill placebo, psychological placebo, or another treatment
 - b. Equivalent to an already established treatment in experiments with adequate statistical power (about 30 per group; cf. Kazdin & Bass, 1989)

OR

- II. A small series of single case design experiments ($n > 3$) with clear specification of group and treatment approach, good experimental designs, at least two different investigators or teams, and comparison of the intervention to pill, psychological placebo, or another treatment.

Level 4: Minimal Support: Treatment does not meet criteria for Levels 1, 2, 3, or 5.

Level 5: Known Risks

Step 2 Is the study population comparable to yours?

Step 2 is relatively straightforward. Stakeholders must decide if an intervention is appropriate for the population they serve.

Even if an intervention has not been studied for use with a particular population, it doesn't necessarily follow that the EBP will be ineffective with that population. The only conclusion that can be drawn is that no current evidence shows that it is effective with that population. See the following note on race and ethnicity.

Race and Ethnicity

It is important to mention here that the issue of race and ethnicity is quite controversial because children and families of diverse races and ethnicities frequently are represented in very small proportions, if at all, in studies evaluating the effectiveness of interventions. This issue is particularly relevant for Hispanic, American Indian, and Asian groups.

Isaacs, Huang, Hernandez, and Echo-Hawk (2005) suggest two approaches for ensuring culturally competent EBPs for children and families of color:

- Cultural adaptations of existing evidence-based practices; and
- Use of culturally specific interventions.

It is beyond the scope of this KIT to provide information about practice-based evidence models that may be used across many different cultures for working with children and youth with Disruptive Behavior Disorders. However, see Isaacs et al. (2005) for a comprehensive discussion of the issues.

Also, obtain information at the Portland Research and Training Center about a current project to develop and test practice-based evidence approaches to establish the effectiveness of programs and services, including culturally specific practices.

See <http://www.rtc.pdx.edu/>

Step 3 Are outcomes meaningful to a local population?

The next step in the process is to answer the question, Are the outcomes of the EBP meaningful to my agency and the children and families we serve? Some of the more commonly desirable outcomes for children and adolescents with Disruptive Behavior Disorders include the following:

- Reduction in:
 - Aggressive behavior;
 - Family conflict;
 - School absences and failure; and
 - Legal system involvement.
- Increase in:
 - School achievement;
 - Positive peer relationships;
 - Parenting skills; and
 - Ability to access other services.

Tables 2A and 2B provide a quick reference to the outcomes that have been seen in the evaluation studies conducted on the EBPs included in this KIT.

Step 4 How does a practice fit with an agency?

Adding EBPs to existing service arrays often requires, at a minimum, carefully examining staffing patterns, staff training and supervision, procedures for measuring and monitoring treatment fidelity and outcomes, and financing methods.

Unless agencies are already thoroughly engaged in valuing and using data for continuous quality improvement, most agencies will have to commit to change. This will entail building an infrastructure to accommodate and support evidence-based decisionmaking and EBPs.

Therefore, the closer the fit between the characteristics of an EBP with an agency's mission and functions, the easier the accommodation may be for the agency.

Evidence-Based and Promising Practices in this KIT contains extensive descriptions of all 18 of the EBPs with detailed information about characteristics of the EBPs, training requirements, and specifics about how these EBPs have been financed. Tables 3A, 3B, 4A, 4B, 5A, and 5B in this booklet provide an overview of characteristics of EBPs that help determine if they are good fits with an agency.



Table 2A: Are the Prevention/Multilevel Outcomes Meaningful to a Local Population?

Intervention	Outcomes
Triple P-Positive Parenting Program	<ul style="list-style-type: none"> ■ Increase in parental confidence ■ Reduction in child behavior problems ■ Improvements in dysfunctional parenting styles
Project ACHIEVE	<ul style="list-style-type: none"> ■ Decrease in discipline problems ■ Decrease in special education referrals and placements ■ Increase in positive school climate ■ Improvements in academic achievement
Second Step	<ul style="list-style-type: none"> ■ Increase in prosocial behavior and social reasoning ■ Improvement in self-regulation of emotions ■ Decreased verbal and physical aggression ■ Decrease in problem behaviors
Promoting Alternative Thinking Strategies	<ul style="list-style-type: none"> ■ Increase in ability to label feelings ■ Reductions in classroom aggression ■ Increase in self-control; ■ Decrease in teacher-reported internalizing and externalizing behaviors
First Steps to Success	<ul style="list-style-type: none"> ■ Decrease in aggression ■ Increase in time spent on academics ■ More positive behavior demonstrated

Table 2B: Are the Intervention Outcomes Meaningful to a Local Population?

Intervention	Outcomes
Incredible Years	<ul style="list-style-type: none"> ■ Increases in parents' use of effective limit setting, nurturing, and supportive parenting ■ Improvement in teachers' use of praise ■ Reductions in conduct problems at home and school
Helping the Noncompliant Child	<ul style="list-style-type: none"> ■ Improvement in parenting skills ■ Improvement in child's behavior and compliance
Parent-Child Interaction Therapy	<ul style="list-style-type: none"> ■ Improvement in parent-child interaction style ■ Improvement in child behavior problems
Parent Management Training–Oregon	<ul style="list-style-type: none"> ■ Significant reductions in child's behavioral problems ■ Reductions in coercive parenting ■ Increases in effective parenting
Brief Strategic Family Therapy™	<ul style="list-style-type: none"> ■ Decrease in substance abuse ■ Improved engagement in therapy ■ Decrease in problematic behavior ■ Increased family functioning ■ Decrease in socialized aggression and conduct disorder
Problem-Solving Skills Training	<ul style="list-style-type: none"> ■ Improvement in behavior as rated by teachers and parents ■ Family life-functioning improvement
Coping Power	<ul style="list-style-type: none"> ■ Decrease in substance abuse ■ Improvement in social skills ■ Less aggressive belief system
Mentoring	<ul style="list-style-type: none"> ■ Increased confidence in school performance ■ Improved family relationships ■ Increased prosocial behaviors
Multisystemic Therapy	<ul style="list-style-type: none"> ■ Decreased arrests and re-arrests ■ Increased school attendance ■ Decreased behavior problems ■ Decreased substance use ■ Improved family relations
Functional Family Therapy	<ul style="list-style-type: none"> ■ Reduction in recidivism and out-of-home placements ■ Improvements in family communication style, family concept, and family interaction
Multidimensional Treatment Foster Care	<ul style="list-style-type: none"> ■ Fewer runaways ■ Less chance of arrest or decrease in arrest rates ■ Decrease in violent activity involvement of incarceration after completing program ■ Fewer permanent placement failures.

Tables 3A and 3B summarize key features of the various EBPs. They include the following:

- The setting for prevention/multilevel or intervention programs;
- The length of prevention/multilevel or intervention programs;
- Whether a family component exists;
- Who delivers the programs; and
- The format of the EBP (individual or group sessions).

Table 3A: Fit with Agency: Prevention/Multilevel EBPs

	Setting				Format
	Clinic Home or School	What is its length?	Family component	Who delivers?	Individual or Group?
Triple P–Positive Parenting Program	C, H, S	Varies due to level implemented (from 1–2 sessions to 8–10 sessions)	Parent training, home visits, partner support skills, mood management workbook material	Trained mental health professionals, health care professionals and school staff (counselors, parent liaisons)	I, G
Project ACHIEVE	S	3 years	Parent training	School administrators, teachers and chosen facilitators	G
Second Step	S	School year	Family guide that includes a video-based parent training program to help parents reinforce skills at home	Classroom-based intervention implemented by teachers and counselors	G
Promoting Alternative Thinking Strategies	S	5 years, 3 times a week for 20–30 minutes	None	Teachers and counselors. It is recommended to hire a PATHS coordinator.	G
First Steps to Success	H, S	3–4 months	Parent training delivered in the home	Coaches with MA degree plus clinical experience work alongside teachers and parents/guardians	I
Early Risers: Skills for Success	H, S	3–6 months for recruitment/screening 2–3 years for the intervention	Parent education workshops, individualized family support	Specially trained family advocate	I
Adolescent Transitions Program	S	Varies by level: Level 1: 6 weeks Level 2: 3 sessions Level 3: 12 sessions with 3-month followup	Family management groups, individual family therapy	Master’s level counselors	I, G



Table 3B: Fit with Agency: Intervention EBPs

	Setting:				Format:
	Clinic Home or School	What is its length?	Family component	Who delivers?	Individual or Group?
Incredible Years	H, S	Less than 22 weeks	Parent training	Parents, teachers, counselors, social workers or master's level therapists	G
Helping the Noncompliant Child	C, H	8–10 sessions	Parent training	Master's level therapist	I
Parent-Child Interaction Therapy	C	10–16 sessions	Parent training, coaching	Master's or doctoral level therapist	I
Parent Management Training—Oregon	C, H	20 sessions over 13 months	Parent training	Trained master's level therapist	I
Brief Strategic Family Therapy™	C, H	12–16 sessions over 3 months	Family therapy	Master's or doctoral level therapist	I
Problem-Solving Skills Training	C, H	20 sessions	Parent training	Master's level therapist	I
Coping Power	S	15-18 months	Parent training	Program specialist/master's or doctoral level therapist and school guidance counselor	G
Mentoring	H, S	1 year or longer	None	Trained adults	I
Multisystemic Therapy	H, S	3-5 months	Family therapy, parent training	Master's or doctoral level therapist	I
Functional Family Therapy	C, H	8-12 sessions	Family therapy	Paraprofessionals and master's level therapists	I
Multidimensional Treatment Foster Care	C, H, S	6-9 months	Training, weekly meetings	Trained treatment families	I

Tables 4A and 4B address training the workforce in the skills and competencies required for the various EBPs. They cover the following:

- The developer’s involvement in training;
- Location of training;
- Length of training;
- Cost of training; and
- Availability of followup coaching.

Table 4A: Fit with Agency: Training and Coaching/Consultation — Prevention/Multilevel EBPs

	Training by developer?	Where?	Length of training?	Cost?	Is followup coaching available?
Triple P– Positive Parenting Program	Yes	Onsite and Regional	2 sets of 2–3 days with repeat in 8–10 weeks	\$21,000 per 20 trainees	Yes
Project ACHIEVE	Yes	Onsite	YR1:5–8 days YR2:4–8 days YR3:4–6 days	Average of \$25,000 per year to \$75,000 for 3 years	Yes
Second Step	Yes	Onsite or offsite options	2½ days or 1-day option	Options: ■ \$399–\$499 per person off site ■ Onsite for \$6,475 + travel for up to 40 people ■ \$1,600 1-day version onsite	Yes
Promoting Alternative Thinking Strategies	Indirectly	Onsite	2–3 days	Options: ■ 1 trainer, 2 days, and 30 participants and ongoing technical assistance (TA) for \$4,000–\$5,000 plus travel ■ 1 trainer, 2 days, and 30 participants but no ongoing TA for \$3,000 + travel	Yes
First Steps to Success	Indirectly	Onsite	2 days for consultants/caseworkers, 1 day for teachers	\$1,000-1,500 per day plus travel expenses for up to 30 coaches and 50 teachers	Yes
Early Risers: Skills for Success	Yes	Onsite	4 days	\$5,000–8,000	Yes
Adolescent Transitions Program	Yes	Onsite	Stage 1: 4-5 days Stages: 2 and 3 varies	Varies by stage and size of group from \$500–1,850 + materials	Yes



Table 4B: Fit with Agency: Training and Coaching/Consultation—Intervention EBPs

	Training by developer?	Where?	Length of training?	Cost?	Is followup coaching available?
Incredible Years	Yes	Onsite and offsite	2–3 days per curriculum (3 possible curricula in total)	\$300–400 per person offsite \$1,500 per day + travel expenses onsite	Yes
Helping the Noncompliant Child	Yes	Onsite	2 days minimum	\$1,500 per day + expenses	Yes
Parent-Child Interaction Therapy	Yes	Offsite	5 days	\$3,000	No
Parent Management Training—Oregon	Yes	Onsite	18 workshop days spread over 1 year	\$25,000 per trainee	Yes
Brief Strategic Family Therapy™	Yes	Onsite	4 (3-day) workshops	\$60,000 (includes coaching)	Yes
Problem-Solving Skills Training*	Yes	Onsite	6–12 months	Graduate school tuition	No
Coping Power	Yes	Onsite	3 days	\$5,000 + travel expenses and materials	Yes
Mentoring	No	Regional	Varies by model	Varies by model; some free	Yes
Multisystemic Therapy	Yes	Regional	5 days for staff; 2 days for supervisors	\$26,000 for a team of 4–6 staff members	Yes
Functional Family Therapy	Yes	Onsite and offsite	2 days onsite plus 2 days offsite. Followup training of 3 onsite visits per year, 2 days each	For 3-8 therapists, about \$35,000 Year 1; \$18,000 Year 2	Yes
Multidimensional Treatment Foster Care	Yes	Onsite and offsite	4–5 days for staff; 2 days for treatment parents	\$40,000–\$50,000 per site	Yes

* Graduate students have been trained as therapists as part of research studies. An infrastructure for training other clinicians is in the planning stages.

The final tables that refer to Fit with Agency are Tables 5A and 5B on *Monitoring and Financing Options*. An integral part of using EBPs within a CQI framework is measuring and assessing the fidelity of the interventions (that is, the extent to which the treatment is delivered as intended) and the client outcomes that result from treatment. The availability of measurement instruments facilitates these processes.

Tables 5A and 5B provide brief information about whether such instruments are available from the developer or purveyor of the various EBPs, and the developers' expectations about their ongoing measurement. Tables 5A and 5B also provide information obtained from the developers of the EBPs related to how the EBPs have been financed.

Table 5A: Fit with Agency: Monitoring and Financing Options—Prevention/Multilevel EBPs

	Is there a fidelity/adherence measure?	If Yes, What Is the expectation of use?	Is an outcome measure specified?	Financing options
Triple P—Positive Parenting Program	Yes	Not required	Yes	Grants, State Funds
Project ACHIEVE	Yes	Required	Yes	Special Education Funds, School Improvement Funds, Safe School Grants, Foundation, Partial Medicaid
Second Step	Yes	Not required	Yes	Safe and Drug Free Schools
Promoting Alternative Thinking Strategies	Yes	Not required	Yes	Safe and Drug Free Schools, School Board Funds, Grants
First Steps to Success	Yes	Required	Yes	School Districts, Grants
Early Risers: Skills for Success	Yes	Not required	Yes	Local Grants, County Funds
Adolescent Transitions Program	Yes	Required	Yes	Federal Grants

Table 5B: Fit with Agency: Monitoring and Financing Options—Intervention EBPs

	Is there a fidelity/adherence measure?	If Yes, What Is the expectation of use?	Is an outcome measure specified?	Financing options
Incredible Years	Yes	Not required	Yes	Grants, State Funds
Helping the Noncompliant Child	Yes	Not required	Yes	Grants, State, Private Insurance, Medicaid
Parent-Child Interaction Therapy	Yes	Not required	Yes	Grants, State, Private Insurance, Medicaid
Parent Management Training—Oregon	Yes	Required	Yes	Grants, State, Private Insurance, Medicaid
Brief Strategic Family Therapy™	Yes	Required	Yes	Grants, State, Private Insurance, Medicaid
Problem-Solving Skills Training	Yes	Not required	No	Grants, State, Private Insurance, Medicaid
Coping Power	Yes	Not required	No	Safe and Drug Free Schools, Local Grant Funding
Mentoring	Yes	Not required	Yes	Grants, Medicaid
Multisystemic Therapy	Yes	Required	Yes	Grant, State, Medicaid
Functional Family Therapy	Yes	Required	Yes	Grant, State, Medicaid
Multidimensional Treatment Foster Care	Yes	Required	Yes	Grant, State, Medicaid



Step 5 How does a practice fit with staff?

Another important piece to consider when selecting an EBP is its fit with an organization's clinicians and other staff members. Gregory Aarons' (2004, 2005) study on provider attitudes about implementing EBPs has shown that the following factors effect an EBPs fit:

- The appeal of the specific EBP itself;
- The requirement to use an EBP;
- The openness of the provider to new practices; and
- The perceived difference between usual practices and an EBP (Aarons, 2005).

Step 6 How does a practice fit with youth and family?

Families and youth are driving changes to systems. These mental health services should:

- Be culturally sensitive;
- Allow for shared decisionmaking;
- Incorporate strength-based principles; and
- Respect each individual family member's voice.

Additionally, their selection of EBPs may be dependent on several factors, such as

- Presenting problems or diagnosis;
- Access to care;
- Availability of care;
- Personal choice; and
- Cost.

Difficulty accessing services and the limited availability of services affect the experience of families and youth in mental health systems. Insurance coverage and transportation availability can present more barriers.

Michigan's Association for Children's Mental Health guide for families *Evidence-Based Practice—Beliefs, Definitions, Suggestions for Families* (2004) is a helpful resource for families and youth preparing for meetings with care providers. (See http://www.acmh-mi.org/41447_ACMH_Booklet.pdf.)

The family worksheets accompanying this KIT contain sample questions that families may ask to assess the fit of EBPs with their own needs and circumstances.

Case Illustrations

The following two case illustrations provide examples of the process of selecting EBPs. One focuses on prevention, the other on intervention.

Case Illustration 1: Prevention/Multilevel

The Case of Oyster Elementary Public School

As principal of Oyster Elementary Public School, I have noticed a growing need for mental health services for children in our school. In the last few years, the number of children who demonstrate verbally and physically aggressive behaviors, limited social reasoning, and an inability to manage emotions has increased.

At the last school staff meeting, teachers and school counselors, growing increasingly frustrated with negative classroom behaviors, asked for leadership on how to respond in an effective, unified way to meet the needs of the children.

An increasing number of parents have also approached me with concerns about their child being bullied at school or on the bus.

Consultation

After speaking with my school superintendent, I consulted with our state project director of mental health services, Dr. Jones. I asked her for information on possible programs to implement in our school to prevent the negative child behaviors. Dr. Jones directed me to the resource, *A Guide for Selecting and Adopting Evidence-Based Practices for Children and Adolescents with Disruptive Behavior Disorder*.

She informed me that the guide included 18 practices, 7 of which fit in the category of Prevention/Multilevel Practices that were primarily implemented in schools. Dr. Jones also suggested that I bring together an advisory panel for the process of selecting and implementing a program.

The advisory panel

Following her advice, I brought together an advisory panel that consisted of the following people:

- The state children's mental health director;
- The director of a community mental health center;
- The superintendent of the school district;
- The school district psychologist;
- The director of special education at the school;
- The director of guidance counseling from the school;
- Two classroom teachers;
- A group of parents; and
- Myself.

The panel agreed to commit themselves to a series of meetings for the selection and implementation process.

The following process took place over a number of months.

Considering needs of audience of interest

The first thing that we explored were the demographics of the children at our school: boys and girls at the K-5 grade level, from White, African American, and Hispanic backgrounds. The KIT (see Table 1A) provided quick access to prevention programs that, at first glance, were a match with our school community: Project ACHIEVE, Second Step, and Promoting Alternative Thinking Strategies (PATHS).



Considering desired outcomes

Then, we explored how meaningful each programs' expected outcomes and levels of evidence were to Oyster Elementary's students. We decided that we would form focus groups to gather formal information from the school community about desired outcomes from an intervention. We conducted the focus groups and then matched the information gathered with the program outcomes identified within the KIT (see Table 1A). By doing this, we realized that the choice of prevention programs that now seemed most appropriate to consider narrowed to two: Second Step and PATHS.

Considering fit with the school

Next, we explored together how well each program would fit with our school. Through our discussion, it became clear that Oyster is a school where teachers and counselors were highly invested in acknowledging the problem and actively participating in the solution. For this reason, we knew we were looking for a program where our school staff would be heavily involved in the process.

The Guide highlighted that both Second Step and PATHS are programs implemented in the school by teachers and counselors (see Table 2A). The advisory panel agreed that we appeared to be on the right track.

Considering intervention characteristics

The Guide helped to highlight quickly differences between the two programs (see Table 3A). The PATHS program did not include a family component. From discussions among the advisory panel members, it became clear that some members of the panel believed that changes in children's behaviors would be more successful if families were involved in the process. However, the advisory panel as a whole was not ready to exclude a program on this one component.

The final concern of the advisory panel was that a program would be able to track fidelity and provide outcome measures. The advisory panel wanted to be sure the program would be implemented both according to design and the program's positive, measured, effect on the children. The Guide showed that both Second Step and PATHS designated both the fidelity and outcome measures we wanted (see Table 5A). It appeared to all on the advisory panel that two programs could potentially be used in their school. To continue the decision process, the advisory panel decided they would use the program descriptions provided in the Guide to gain more detailed information.

Indepth review of multilevel/prevention programs

First, we reviewed the Second Step program. A few panel members noted that Second Step was implemented using curriculum kits. It was also noted that in regard to training, each participant receives a comprehensive Trainer's Manual, CD-ROM, and a set of four staff training videos.

Professional development credits are available for completion of the regional Second Step Training for Trainers. The panel recognized that this feature would appeal to the teaching staff. The advisory panel noted too that the cost for materials varies according to the curriculum kits purchased and ranges from \$159 to \$289, but that volume discounts are available for orders over a certain size. Finally, the advisory panel noted that Second Steps has a funding specialist on staff to provide information on up-to-date grant announcements and funding opportunities. The advisory panel decided to explore the developer's website, as this information was provided as part of the program description.

Next, the panel reviewed the PATHS program. The Guide showed that PATHS is a 5-year program. The PATHS curriculum provided a manual with specific instructions and developmentally appropriate lessons. The advisory panel noted that the curriculum materials ranged from \$100 to \$679, higher than Second Step. Unlike Second Step, the PATHS curriculum was available in Spanish. The advisory panel considered how useful this would be for the students. PATHS, however, did not provide any formal readiness instruments, something the panel felt would be important for the teachers. The program description provided the developer's contact information. The panel decided to contact the developers to have their remaining questions clarified.

Further directions

With the help of the *Guide for Selecting and Adopting Evidence-Based Practices*, the advisory panel gathered information that considered the needs of the community, the population served, and the fit of the intervention with the agency, the families and the youth. From here, the panel would further explore the two programs, decide on one, and then bring the program to the school board, the school staff, and the parent association for review.

Case Illustration 2: Intervention

A recent needs assessment revealed that an urban community just outside of a major U.S. city saw an increase in disruptive behaviors of adolescents. Examples of these include juvenile arrests, underage substance use, and lower school performance. As a result of this assessment, the community buzzed about the need for some type of intervention. The director of a major mental health clinic, Dr. Cook decided to bring together an advisory panel to help consider a number of possible interventions that could be implemented to address the growing need of adolescents in the community.

The advisory panel that was created consisted of a number of different voices in the community:

- The state mental health director;
- The directors of the local child welfare agency;
- Juvenile justice agency;
- The community mental health clinic director;
- Clinicians from the mental health center;
- Area high school principals;
- Representative of family organizations;
- Families; and
- Youth.

Dr. Cook decided to use the resource, *A Guide for Selecting and Adopting Evidence-Based Practices for Children and Adolescents with Disruptive Behavior Disorder*, as a tool for selecting an evidence-based practice. As the advisory panel met, it soon became apparent that a number of decisions were to be made to narrow down the information in the Guide to just one program.

The first decision was whether to implement a prevention program or an intervention. The advisory panel noted that their interest lay in addressing the needs of children with identified disruptive behavior disorders. Therefore, the panel focused only on the programs marked as Interventions in the Guide.



Considering the population of interest and desired outcomes

The advisory panel first explored the Guide (see Tables 1A and B) to compare the identified population of the interventions with their own community needs. Knowing that the focus was on late adolescence, the panel did not consider any program that did not extend to youth age 18 years. Neither did it consider any program that had not included Hispanic populations, as the community was predominantly Hispanic. With these limitations, the advisory panel was considering four interventions: Brief Strategic Family Therapy™, Functional Family Therapy, Mentoring, and Multidimensional Treatment Foster Care.

The next choice to make was to identify the specific outcomes that the panel believed were important to address. In the Guide (see Table 3B), the outcomes from the Brief Strategic Family Therapy and Mentoring were of most interest.

Considering the characteristics of agency

Next, the advisory panel reviewed the intervention characteristics in the Guide (see Table 3B). The advisory panel decided to exclude Mentoring from further consideration because of the lack of a family component. Perhaps, the advisory panel considered, Mentoring could be an intervention that was added to the community, but not necessarily through the community mental health clinic.

Considering the implementation process

Now only considering Brief Strategic Family Therapy™ and Multisystemic Therapy, the panel explored the cost and length of training highlighted in the Guide (see Table 4B). A significant difference in cost existed between the models; this was not, however, an immediate concern or reason to exclude either program yet.

Further directions

The panel decided that it would read the individual program descriptions in more detail, and meet again to discuss the idea of implementing one or both of the programs at the clinic. Two panel members also volunteered to contact the program developers to gather more detailed information. The advisory panel would meet again to discuss the information and continue the process of selecting an intervention or interventions to implement in the community.

Hints on Understanding Research Study Designs

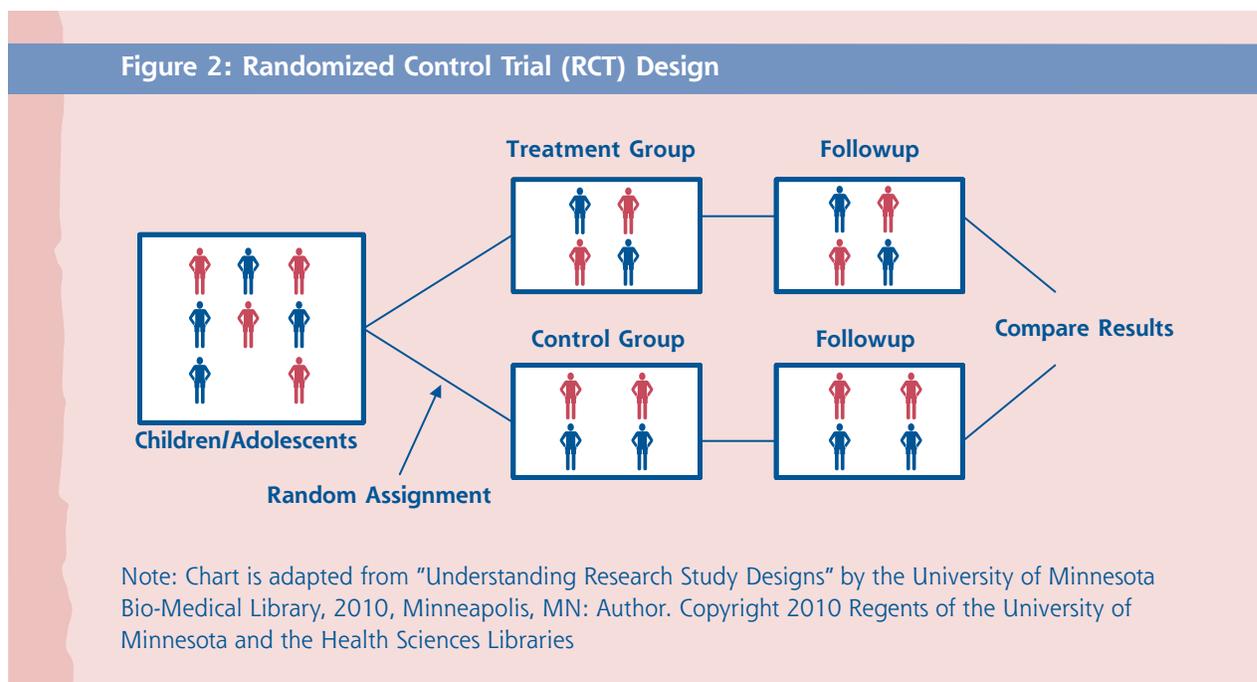
Some readers want a better grasp of research so that they have a clearer understanding of the ways in which the EBPs in this KIT were evaluated. This section provides a very brief overview.

How do we know that the evidence for one intervention is better or stronger than for another intervention? The answer depends on the way the studies are designed and conducted. As a study's results show that an intervention is effective and has achieved the desired outcome, it is also important to verify that people who received the intervention did not improve for some other reason. Research designs do this by controlling for variables that could contribute to the person's improvement. For example, people can get better because an illness simply took its course, or perhaps their health improved because of additional care they received beyond the intervention itself. Others might appear to get better because of the way the study was designed and conducted. A study that is not well designed might incorrectly lead to the conclusion that the intervention made people better when that was indeed not the case.

Some research designs compare one group of people who received the intervention (the experimental group) with another group that did not (the control group). If most people in the experimental group improved while those in the control group did not, one conclusion might be that the intervention is effective and that people in the experimental group that received the intervention are better as a result.

Can we say that? Is such a conclusion valid? Not necessarily; significant differences might have existed between the two groups in terms of age, sex, ethnicity, or other characteristics that could affect the outcome.

Researchers use specific designs called randomized control trials (RCT) to address these alternative explanations. As shown in Figure 2, an RCT is a study in which there are two groups: one treatment and one control group. The treatment group receives the treatment under investigation, and the control group receives either no treatment or standard treatment. An important feature of RCT studies is that children and adolescents are randomly assigned to each group so that each group has a similar sample population.



Randomized control trials are considered to have stronger “proof” than other types of studies. When many such RCT studies are conducted—in different locations, by different researchers, in settings that resemble the real world—the evidence that the intervention is effective builds and is increasingly corroborated. These interventions are the ones that obtain the highest rating in terms of evidence.

Other studies may have been conducted by just one group of researchers or in just one place. These interventions have less evidence, but may still be effective.

Other types of studies, termed *quasi-experimental*, are similar to the randomized control trial, except that there are no random assignments to the different groups. This type of study is still useful in determining the effectiveness of an intervention, but the evidence resulting from this type of study is not as strong as a randomized control trial.

The important point here is that some interventions have more—or higher—levels of evidence than others. These levels of evidence are based on the selection of study designs and the number of times the interventions have been evaluated as successful. Different schemes exist to describe such levels of evidence. The American Psychological Association has a hierarchy of the levels of evidence. The National Institute of Mental Health (NIMH) also has an approach to such levels. These can be accessed at <http://www.apa.org> and <http://www.nimh.nih.gov>, respectively.

In the booklets of this KIT, you will see many references to the level of evidence found for the 18 EBPs covered in this KIT. All 18 EBPs have at least a moderate to good level of evidence support.

Selecting EBPs

References

- Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The evidence-based practice attitude scale (EBPAS). *Mental Health Services Research, 6*, 61–74.
- Aarons, G. A. (2005). Measuring provider attitudes toward evidence-based practice: Consideration of organizational context and individual differences. *Child and Adolescent Psychiatric Clinics of North America, 14*, 255–271.
- Hawaii Department of Health, Child and Adolescent Mental Health Division. (2004). Evidence-Based Services Committee—2004 Biennial Report—Summary of Effective Interventions for Youth with Behavioral and Emotional Needs. Retrieved from <http://www.hawaii.gov/health/mental-health/camhd/library/pdf/ebs/ebs011.pdf>
- Henderson, J. L., MacKay, S., & Peterson-Badali, M. (2006). Closing the research-practice gap: Factors affecting adoption and implementation of a children's mental health program. *Journal of Clinical Child and Adolescent Psychology, 35*, 2–12.



- Isaacs, M. R., Huang, L. N., Hernandez, M., & Echo-Hawk, H. (2005). *The road to evidence: The intersection of evidence-based practices and cultural competence in children's mental health*. Washington, DC: The National Alliance of Multi-Ethnic Behavioral Health Associations.
- Kazdin, A. E., & Bass, D. (1989). Power to detect differences between alternative treatments in comparative psychotherapy outcome research. *Journal of Consulting and Clinical Psychology, 57*, 138–147.
- Sheehan, A. K., Walrath, C. M., & Holden, E. W. (2007). Evidence-based practice use, training and implementation on the community-based service setting: A survey of children's mental health service providers. *Journal of Child and Family Studies, 16*, 169–182.
- Shortell, S. M., O'Brien, J. L., Carman, J. M., Foster, R. W., Hughes, E. F. X., Boerstler, H., & O'Connor, E. J. (1995). Assessing the impact of continuous quality improvement/total quality management: Concept versus implementation. *Health Services Research, 30*, 377–401.
- Walrath, C. M., Sheehan, A. K., Holden, E. W., Hernandez, M., & Blau, G.M. (2006). Evidence-based treatments in the field: A brief report on provider knowledge, implementation, and practice. *The Journal of Behavioral Health Services & Research, 33*, 244–253.

HHS Publication No. SMA-11-4634
Printed 2011

29778.0311.8712010402

