

## Addressing Early Childhood Emotional and Behavioral Problems

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More than 10% of young children experience clinically significant mental health problems, with rates of impairment and persistence comparable to those seen in older children. For many of these clinical disorders, effective treatments supported by rigorous data are available. On the other hand, rigorous support for psychopharmacologic interventions is limited to 2 large randomized controlled trials. Access to psychotherapeutic interventions is limited. The pediatrician has a critical role as the leader of the medical home to promote well-being that includes emotional, behavioral, and relationship health. To be effective in this role, pediatricians promote the use of safe and effective treatments and recognize the limitations of psychopharmacologic interventions. This technical report reviews the data supporting treatments for young children with emotional, behavioral, and relationship problems and supports the policy statement of the same name.

At least 8% to 10% of children younger than 5 years experience clinically significant and impairing mental health problems, which include emotional, behavioral, and social relationship problems. An additional 1.5% of children have an autism spectrum disorder, the management of which has been reviewed in a separate report from the American Academy of Pediatrics (AAP).<sup>2</sup> Children with emotional, behavioral, and social relationship problems ("mental health problems"), as well as their families, experience distress and can suffer substantially because of these problems. These children may demonstrate impairment across multiple domains, including social interactions, problematic parent-child relationships, physical safety, inability to participate in child care without expulsion, delayed school readiness, school problems, and physical health problems in adulthood.<sup>3–13</sup> These clinical presentations can be distinguished from the emotional and behavioral patterns of typically developing children by their symptoms, family history, and level of impairment and, in some disorders, physiologic signs. 14-17 Emotional, behavioral, and relationship disorders rarely are transient and often have abstract



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The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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lasting effects, including measurable differences in brain functioning in school-aged children and a high risk of later mental health problems. 18-24 Exposure to toxic stressors, such as maltreatment or violence, and individual, family, or community stressors can increase the risk of early-onset mental health problems, although such stressors are not necessary for the development of these problems. Early exposure to adversity also has notable effects on the hypothalamic-pituitary-adrenal axis and epigenetic processes, with short-term and long-term consequences in physical and mental health, including adult cardiovascular disease and obesity.25 In short, young children's early emotional, behavioral, and social relationship problems can cause suffering for young children and families, weaken the developing foundation of emotional and behavioral health, and have the potential for long-term adverse consequences. 26,27 This technical report reviews the data supporting treatment of children with identified clinical disorders, including the efficacy, safety, and accessibility of both pharmacologic and psychotherapeutic approaches.

#### **PREVENTION APPROACHES**

Although not the focus of this report, a full system of care includes primary and secondary preventive approaches, which are addressed in separate AAP reports.<sup>28,29</sup> Many family, individual, and community risk factors for adverse emotional, behavioral, and relationship health outcomes, including low-income status, exposure to toxic stressors, and parental mental health problems, can be identified early using systematic surveillance and screening. An extensive review of established prevention programs for the general population and identified children at high risk are described in the Substance

Abuse and Mental Health Services Administration (SAMHSA)'s National Report of Evidence-**Based Programs and Practices** (http://www.nrepp.samhsa.gov/ AdvancedSearch.aspx). Outcomes of these programs highlight the value of early intervention and the potential to improve parenting skills using universal or targeted approaches for children at risk. The programs use a variety of approaches, including home visiting, parent groups, targeted addressing of basic needs, and videos to enhance parental self-reflection skills and have demonstrated a range of outcomes related to positive emotional, behavioral, and relationship development. One model developed specifically for the pediatric primary care setting is the Video Interaction Project, in which parents are paired with a bachelor'slevel or master's-level developmental specialist who uses video and educational techniques to support parents' awareness of their child's developmental needs.30

Acknowledging that early preventive interventions are an important component of a system of care, the body of this technical report focuses on treatment of identified clinical problems rather than children at risk because of family or community factors.

## PSYCHOSOCIAL TREATMENT APPROACHES

The evidence supporting family-focused therapeutic interventions for children with clinical-level concerns is robust, and these are the first-line approaches for young children with significant emotional and behavioral problems in most practice guidelines.<sup>31–35</sup>

Generally, these interventions take an approach that focuses on enhancing emotional and behavioral regulation through specialized parenting tools and approaches. The interventions

are implemented by clinicians with training in the specific treatment modality, following manuals and with fidelity to the treatment model. Primary care providers can be trained in these interventions but more often lead a medical home management approach that includes ongoing primary care management and support and concurrent comanagement with a clinician trained in implementing an evidence-based treatment (EBT).

Effective treatments exist to address early clinical concerns, including relationship disturbances, attention-deficit/hyperactivity disorder (ADHD), disruptive behavior disorders, anxiety, and posttraumatic stress disorder. Measured outcomes include improved attachment relationships, symptom reduction, diagnostic remission, enhanced functioning, and in one study, normalization of diurnal cortisol release patterns, which are known to be related to stress regulation and mood disorders.  $^{31,33-35}$ Psychotherapies, including treatments that involve cognitive, psychological, and behavioral approaches, have substantially more lasting effects than do medications. Some preschool treatments have been shown to be effective for years after the treatment ended, a finding not matched in longitudinal pharmacologic studies.36-38 It is for this reason that the recent ADHD treatment guidelines from the AAP emphasize that first-line treatment of preschoolers with well-established ADHD should be family-focused psychotherapy.<sup>39</sup>

## EXAMPLES OF EVIDENCE-BASED TREATMENTS FOR EXISTING DIAGNOSES IN YOUNG CHILDREN

#### **Infants and Toddlers**

This report focuses on programs that target current diagnoses or clear clinical problems (rather than risk) in infants and toddlers and includes only those with rigorous randomized controlled empirical support. Because the parent-child relationship is a central force in the early emotional and behavioral well-being of children, a number of empirically supported treatments focus on enhancing that relationship to promote child well-being. Each intervention focuses on enhancing parents' ability to identify and respond to the infant's cues and to meet the infant's emotional needs. All interventions use infant-parent interactions in vivo or through video to demonstrate the infant's cues and opportunities to meet them. Some explicitly focus on enhancing parents' self-reflection and increasing awareness of how their own upbringing may influence their parenting approach.

Child Parent Psychotherapy and its partner Infant Parent Psychotherapy are derived from attachment theory and address the parent-child relationship through emotional support for parents, modeling protective behaviors, reflective developmental guidance, and addressing parental traumatic memories as they intrude into parent-child interactions. 40,41 This therapy is flexible in its delivery and can be implemented in the office, at home, or in other locations convenient for the family. On average, child-parent psychotherapy lasts approximately 32 sessions. In infants and toddlers, the empirically supported therapy enhances parentchild relationships, attachment security, child cognitive functioning, and normalization of cortisol regulation.42-44

For infants and toddlers who have been adopted internationally, those in foster care, or those thought to be at high risk of maltreatment because of exposure to domestic violence, homelessness, or parental substance abuse, the Attachment and Biobehavioral Catch-Up caregiver training supports

caregivers in developing sensitive, nurturing, nonfrightening parenting behaviors. In 10 sessions, caregivers receive parenting skills training, psychoeducation, and support in understanding the needs of infants and young children. This intervention model is associated with decreased rates of disorganized attachment, the attachment status most closely linked to psychopathology, and is associated with increased caregiver sensitivity and, notably, normalized diurnal cortisol patterns. <sup>45–47</sup>

In the Video Feedback to Promote Positive Parenting program, mothers with low levels of sensitivity to their child's needs review video feedback about their own parent–child interactions, with a focus on supporting sensitive discipline, reading a child's cues, and developing empathy for a child who is frustrated or angry. In the most stressed families, this intervention is associated with decreased infant behavioral difficulties and increased parental sensitivity.<sup>48</sup>

Treatments focused on mother-infant dyads affected by postpartum depression show promising effects on relationships and infant regulation.<sup>49</sup> Data in older children suggest effective treatment of maternal depression may result in reduction of child symptoms or an increase in caregiving quality.<sup>50–52</sup>

#### Preschoolers (2-6 Years)

ADHD and disruptive behavior disorders (eg, oppositional defiant disorder and conduct disorder) are the most common group of early childhood mental health problems, and a number of parent management training models have been shown to be effective. It should be noted that the criteria for these disorders have been shown to have validity in young children, <sup>22,53</sup> although the validity is dependent on a systematic assessment process that is most easily conducted in specialty settings. All of these parent training

models share similar behavioral principles, most consistently teaching parents: (1) to implement positive reinforcement to promote positive behaviors; (2) to ignore low-level provocative behaviors; and (3) to respond in a clear, consistent, and safe manner to unacceptable behaviors. The specific approaches to sharing these principles with parents vary across interventions. Table 1 presents some of the characteristics of the best-supported programs, all of which are featured on SAMHSA's national registry of evidence-based programs and practices.<sup>34,54</sup> The New Forrest Therapy, Triple P (Positive Parenting Practices), the Incredible Years Series (IYS), Helping the Noncompliant Child, and Parent Child Interaction Therapy (PCIT) all have shown efficacy in reducing clinically significant disruptive behavior symptoms in toddlers, preschoolers, and early school-aged children. The New Forrest Therapy, Helping the Noncompliant Child, and IYS also have proven efficacy in treating ADHD.35,55-57

In the New Forrest Therapy, sessions include parent-child activities that require sustained attention, concentration, turn-taking, working memory, and delay of gratification, all followed by positive reinforcement when the child is successful. 32,35 This model has been shown to decrease ADHD symptoms substantially and to decrease parents' negative statements about their children.<sup>35</sup> Triple P is a multilevel intervention that includes targeted treatment of children with disruptive behaviors.<sup>55</sup> The 3 highest levels of care include teaching parents about the causes of disruptive behaviors and effective strategies as well as specific problem solving about the child's individual patterns. The child is included in some sessions to create opportunities to implement the new strategies and for the therapist to model the behaviors. IYS includes a parent-focused treatment approach,

Program	Age Range Supported by Data	Patient Population	No. of Children in Randomized Controlled Trials	Formal Psychoeducation for Parents	Real-Time Observed Parent—Child Interactions	Special Characterístics	Duration	Follow-up Duration (If Applicable)	Evidence Reflecting Efficacy for ADHD (Effect Size)	Evidence Demonstrating Efficacy for ODD and CD (Effect Size)
New Forest <sup>32,35</sup>	30–77 mo	Children with ADHD	202	, kes	Yes	Parent—child tasks are specifically intended to require attention     Occurs in the home     Explicit attention to parental depression	5 weekly sessions	n/a	Yes (1.9)	Yes (0.7)
IVS parent training, teacher training, and child training <sup>32,5357–59</sup>	3-8 y	Children with CD, ODD, and ADHD	7.79	, kes	ON.	Separate parent and child groups     Parent training uses video vignettes for discussion     Child training includes circle time learning and coached free play	20 weekly 2-h sessions		Yes (0.8)	Yes (home behavior, 0.4—0.7; school behavior, 0.7—1.25)
Triple P,55 6061 (levels 3 and 4)	36–48 mo	Children at high risk with parental concerns about behavioral difficulties (level 4)	330	, kes	Yes	Multiple levels of intervention     Primarily training parents with some opportunities to observe parent-child interactions     Handouts and homework supplement the treatment	• Primary care = 4 sessions of 15 min • Standard treatment is 10 sessions	6 and 12 mo: effect size, 0.66 for children <4 y, 0.65 for children >4 y <sup>62</sup>	°N .	Yes (level 3: 0.69, level 4: 0.96; lower for children <4 y) <sup>63</sup>
Triple P online <sup>59</sup>	2-9 y	Children with CD and ODD	116	O <sub>N</sub>	ON.	Interactive self-directed program delivered via the internet Instruction in 17 core positive parenting skills	8 modules (45–75 min)	6 mo: effect size from baseline, 0.6-0.7 on ECBI, no effect on SDQ	No effect	Yes (1.0; by parent report)

Positional Population In Manage Range Patient	TABLE 1 Continued	77									
2–7 y Children with 358 Yes, minimal Yes -7 Through a 1-way Depends on Up to 6 yafter Minimal mirror, therapist parent skill treatment, development development fewer signs and therapist parent development fewer signs and disruptive behavior symptoms symptoms symptoms have behavior and disruptive behavior condense parent—child parent—child interactions with a 350 Yes Yes Involves two phases Depends on 6.8 mo Effect size 1.24; plaint and compliant behaviors behaviors (Compliance of the compliance of training using training using training using training using thome practice in the practice of the complement of the practice of the compliance of the complement of the practice of the complement of the complement of the practice of the complement	Program	Age Range Supported by Data	Patient Population	No. of Children in Randomized Controlled Trials	Formal Psychoeducation for Parents	Real-Time Observed Parent-Child Interactions	Special Characteristics	Duration	Follow-up Duration (If Applicable)	Evidence Reflecting Efficacy for ADHD (Effect Size)	Evidence Demonstrating Efficacy for ODD and CD (Effect Size)
3–8 y Children with 350 Yes Yes Involves two phases Depends on 6.8 mo Effect size 1.24;  liant noncompliant inattention behaviors Attention Compliance training using demonstration, role plays, and in-office and at home practice	PCIT <sup>3</sup> 7,64.65	2-7 y	Children with clinical level disruptive behavior symptoms	358	Yes, minimal	Yes	• Through a 1-way mirror, therapist coaches parent during in vivo interactions with child parent-child interactions • Progress through therapy determined by parents' skill	Depends on parent skill development	Up to 6 y after treatment, fewer signs of disruptive behavior disorder than baseline	Minimal	Yes (1.45) <sup>38</sup>
	Helping the Noncompliant Child <sup>57</sup>	2-8 y	Children with noncompliant behaviors	350	Yes	Yes	Involves two phases 1) Differential Attention 2) Compliance training using demonstration, role plays, and in-office and at home practice	Depends on parent skill development	6.8 m o	Effect size 1.24; inattention 1.09; hyperactivity/ impulsivity: 1.21	Yes (but no ES reported)

in which groups of parents learn effective strategies, practice with each other, and discuss clinical vignettes presented on videos.<sup>56</sup> The child group treatment can occur concurrently with the parent training and focuses on emotional recognition and problem solving. This treatment initially was developed to treat oppositional defiant disorder and conduct disorder, for which a large body of evidence demonstrates its efficacy. Recent studies also have demonstrated effectiveness in treating inattention and hyperactivity.66 An unintended yet measureable benefit is promoting language.<sup>67</sup> In PCIT, parents are coached in positive interactions and safe discipline with their child by the therapist, who is behind a one-way mirror and communicates to a parent via a small microphone in the parent's ear ("bug in the ear"). This treatment is unique because parents' achievement of specific skills determines the pace of the therapy, allowing movement from the first phase, focused on positive reinforcement, to the second phase, focused on safe, consistent consequences. PCIT has been shown to have large effects on child behavior problems and parent negative behaviors in real time. Importantly, it is also effective in reducing recidivism of maltreating parents.<sup>68</sup> Helping the Noncompliant Child also provides 2 portions of the treatment, with the first focused on differential attention and the second focused on compliance training. Parents move through the therapy based on observed skill acquisition, learning by demonstration, role plays, and practice at home and in the office with their child. Helping the Noncompliant Child has been shown to have similar effectiveness as NFP in treating ADHD in children 3 to 4 years old and those wtih comorbid ODD.69

Anxiety disorders also are common in very young children, with nearly

10% of children meeting criteria for at least 1 anxiety disorder. Cognitive behavioral therapy and child-parent psychotherapy, both of which also are listed on the SAMHSA registry of EBTs, are effective in reducing anxiety in very young children. When cognitive behavioral therapy is modified to match young children's developmental levels, children as young as 4 years can learn the necessary skills, including relaxation strategies, naming their feelings, and learning to rate the intensity of the feelings.31 In cognitive behavioral therapy, children are exposed to the story of their trauma in a systematic, graduated fashion, using the coping strategies and measuring feeling intensity skills that they practice simultaneously throughout the intervention. Two randomized studies have examined cognitive behavioral therapy in traumaexposed preschoolers, and both have shown that children in the cognitive behavioral therapy treatment arm showed fewer posttraumatic stress symptoms as well as fewer symptoms of disruptive behavior disorders than did children in supportive treatment.<sup>70,71</sup> Effects are sustained for up to a year after treatment.<sup>71,72</sup> Child-parent psychotherapy is similarly effective in treating children exposed to trauma. Child-parent psychotherapy is an attachmentfocused treatment that supports the parent in creating a safe, consistent relationship with the child through helping the parent understand the child's emotional experiences and needs as well as parental reactions.<sup>40</sup> Child-parent psychotherapy is more effective in reducing child and parent trauma symptoms than supportive case management and community referral.<sup>73</sup> Importantly, child-parent psychotherapy shows treatment durability with sustained results at least 6 months after treatment.

Other more common anxiety disorders and mood disorders have received less research attention.

CBT has been shown effective in addressing mixed anxiety disorders including selective mutism, generalized anxiety disorders, separation anxiety disorder, and social phobia.62,63 A randomized controlled trial demonstrated that modified PCIT was effective in helping parents recognize emotions, although not better than parent education in reducing depressive symptoms.<sup>74</sup> Significant controversy and limited data about the validity of diagnostic criteria for bipolar disorder remain, and no rigorous studies of nonpharmacologic interventions in this age group exist.75

Although the studies described previously show positive effects of parent management training approaches, limitations are notable. Attrition of up to 30% is not uncommon among these approaches, suggesting that there is a significant proportion of the population for whom these treatments do not seem to be a good fit, whether because of the frequency of appointments, the content, the therapeutic relationship, stigma about mental health care, or other barriers. <sup>60,76,77</sup>

## PSYCHOPHARMACOLOGIC TREATMENT APPROACHES

As highlighted in both the professional and lay press, an increasing number of publicly and privately insured preschool and even younger children are receiving prescriptions for psychotropic medications. 78-81 After increasing drastically in the 1990s, claims data indicate that rates of stimulant prescriptions have plateaued in recent years, but the rates of prescriptions of atypical antipsychotic agents continue to increase. 78,81-83 Although prescribing data are limited, it appears that pediatric providers are the primary prescribers for psychopharmacologic treatment in children younger

than 5 years, as they are for older children. 84,85

The evidence base related to psychopharmacologic medications in young children is limited, and clinical practice has far outpaced the evidence supporting safety or efficacy, especially for children in foster care. 33,81 Specifically, 2 rigorous randomized controlled trials have examined the safety and efficacy of medications in young children. Both studies found that treatment of ADHD in young children with medication, specifically methylphenidate and atomoxetine, was more effective than placebo but less effective than documented in older children. 36,86,87 Both also reported that young children had higher rates of adverse effects, especially negative emotionality and appetite and sleep problems, than did older children.  $^{86,87}$ Less rigorously studied are the atypical antipsychotic agents, such as risperidone, olanzapine, and aripiprazole, for which prescription rates have increased substantially.33,88 These agents have known metabolic risks, including obesity, hyperlipidemia, glucose intolerance, and hyperprolactinemia, as well the potential for extrapyramidal effects.<sup>89,90</sup> Long-term safety data regarding use of these medications in humans, including the effects on the brain during its most rapid development, are not available.

## ACCESS TO EVIDENCE-BASED TREATMENTS

The balance of risks and benefits of treatment of early childhood emotional, behavioral, or relationship problems strongly favors the safety and established efficacy of the EBTs over the potential for medical risks and lower levels of evidence supporting the medication. Fewer than 50% of young children with emotional, behavioral, or relationship disturbances, even

those with severity sufficient to warrant medication trials, receive any treatment, especially nonpharmacologic treatments. 11,78,91,92 A number of barriers limit access to nonpharmacological EBTs.

Residency training and continuing medical education has traditionally provided limited opportunities for collaboration between pediatric and child psychiatry residents and with other mental health providers, including doctoral level and master's level clinicians, although there are calls to increase these opportunities.93,94 The limited opportunities for collaboration in training and limited supervised opportunities to assess young children with mental health problems likely result in graduating residents having limited experience in early childhood mental health as they enter the primary care workforce. The AAP has worked to address this gap by developing practice transformation approaches, including educational modules and anticipatory guidance approaches that promote emotional, behavioral, and relationship wellness (see the AAP Early Brain and Child Development Web site at http://www.aap.org/en-us/ advocacy-and-policy/aap-healthinitiatives/EBCD), and around the country, there appears to be an increase in collaborative training opportunities for pediatric residents with developmental-behavioral pediatrics faculty and fellows, triple board residents, child and adolescent psychiatry trainees, and other mental health professionals.

Many of these barriers are not specific to early childhood emotional, behavioral, and relationship health but are quite apparent in this area. Although representative epidemiologic data examining the rates of psychotherapeutic treatment of preschoolers are not available, only 1 in 5 older children with a mental health problem receives treatment, 95 and it seems likely that

the rate is lower among preschoolaged children. A major challenge is the workforce shortage among child psychiatrists, child mental health professionals, and pediatric specialists trained to meet the specialized emotional, behavioral, and relationship needs of very young children and their families.96-99 Anecdotally, it seems that many therapists trained in EBTs remain close to academic centers, further exacerbating the shortage in regions without such a center. Promising statewide initiatives, such as "PCIT of the Carolinas" learning collaborative, which promote organizational readiness and capacity within agencies, clinician competence, and treatment fidelity and consultation with therapists, may begin to foster access to EBTs. Such models are promising approaches to improving access to clinicians trained to evaluate a very young child or to implement EBTs.

Even in communities with early childhood experts who are trained in EBTs, third-party payment systems traditionally have rewarded brief medication-focused visits.28 When emotional and behavioral health services are "carved out" of health insurance, important barriers to accessing care include limitations on primary care physicians' ability to bill for "mental health" diagnoses, limits on numbers of visits, payer restriction of mental health providers, and low payment rates.98,100-102 Until 2013, the Current Procedural Terminology coding system did not recognize the extended time needed for early childhood emotional and behavioral assessment and treatment (and the payment for the new code tends to be minimal), and many payers will not reimburse for services without the patient present or for phone consultation or case conferences. Lastly, the billing and coding system does not recognize relationshipfocused therapy, requiring the

individual participants to have an *International Classification of Diseases*—codable diagnosis, and only a few states accept developmentally specific diagnoses, such as the Diagnostic Criteria: 0-5, as reimbursable conditions.<sup>103</sup>

Finally, stigma and parental beliefs may interfere with referrals to EBTs for very young children with emotional, behavioral, and relationship problems. 104-108 Parents' interest in treatment may be influenced by perceived stigma related to the mental health problem or their own experiences with the mental health system. 109 Provider stigma about mental health and concerns about a child being "labeled" may reduce referrals as well. Some parents also may be concerned that involvement with a mental or behavioral health specialist may increase their risk of referral to child protection services.

## INNOVATIVE MODELS OF ACCESS THROUGH THE MEDICAL HOME

For children with emotional. behavioral, or relationship problems, the pediatric medical home remains the hub of a child's care, just as it is for other children with special health care needs. 110 Even without a comprehensive diagnostic assessment or knowledge of the details of each EBT, use of specific communication strategies, the "common factors" approach, has been shown to improve outcomes in older children. Specifically, implementation of the common factors approach was associated with reduced impairment from symptoms and reduced parent symptoms in a randomized controlled trial of 58 providers. 111 Subsequently, the mnemonic "HELP" was introduced by the AAP Task Force on Mental Health to prompt clinicians in key elements of the model, including offering **h**ope, demonstrating **e**mpathy, demonstrating loyalty, using the

language the family uses about the concerns, and **p**artnering with the family to develop a clearly stated **p**lan, with the parents' **p**ermission.<sup>112</sup> Because of the stigma related to mental health issues, "hope" and "loyalty" are especially powerful first steps.

Innovative and successful adaptations of EBTs have been developed for the primary care setting.55,64,65 Triple P has been implemented successfully in primary care settings using nurse visits to provide the psychoeducation for parents and also has been studied as a self-directed intervention for parents of children with clinically significant disruptive behavior symptoms, with modest but sustained effects up to 6 months.61 A pilot PCIT adaptation for primary care showed promising results, although larger studies are needed.113 Most recently, a randomized controlled trial demonstrated that the Incredible Years Series can be implemented effectively in the pediatric medical home for children with mild to moderate behavior problems. In this study, parent-reported behavioral problems decreased significantly compared with the group on the wait list, as did observed negative parentchild interactions.114

The strategy for identifying providers of EBTs varies state to state. However, all but 3 states have an Early Childhood Comprehensive Services grant from the Human Resources and Service Administration (http://mchb.hrsa. gov/programs/earlychildhood/ comprehensivesystems/grantees/) and are developing systems of care for young children. EBTs tend to be concentrated around academic settings, so contacting local developmental-behavioral pediatric divisions and child and adolescent psychiatry and psychology divisions often helps, and the originator of the model often knows providers trained in the intervention (eg, www.pcit.

org). Innovative practice models, such as consultation or colocated mental health professionals, can be effective approaches to ensuring children have access to care.<sup>115</sup>

In areas with more trained EBT providers, opportunities for colocated care seem promising. In such models, a clinician, who is often a master's level clinician or psychologist, works in the practice as part of the team to provide shortterm mental health interventions, such as skills-training in behavioral management. In older children, such interventions are effective in decreasing ADHD and oppositional defiant disorder, although not conduct disorder or anxiety, and in increasing the likelihood of treatment completion. 116 Models of consultation that support primary care providers in the management of children who have been referred for EBT or who have no access to an EBT are under development, often through federally funded projects, such as SAMHSA's Linking Actions to Unmet Needs in Child Health Project (http://media.samhsa.gov/ samhsaNewsletter/Volume\_18\_ Number\_3/PromotingWellness.aspx).

#### **COMPREHENSIVE TREATMENT PLAN**

Clinical emotional, behavioral, or relationship problems commonly cooccur with other developmental delays, especially speech problems. For example, in one mental health program for toddlers, 77% of children also had a developmental delay. 117 A comprehensive treatment plan includes attention to any comorbid conditions, although such combined or serial treatments have not been studied explicitly. Similarly, family mental health problems, such as maternal depression, can reduce the efficacy of parent management training approaches. In older children, effective treatment of maternal depression is effective in reducing child symptoms and fewer diagnoses.51

#### **SUMMARY**

Very young children can experience significant and impairing mental health problems at rates comparable to older children. Early adversity, including abuse and neglect, increases the risk of early childhood emotional, behavioral, and relationship problems and is associated with developmental, medical, and mental health problems through the lifespan. EBTs can address early childhood mental health problems effectively, reducing symptoms and impairment and even normalizing biological markers. By contrast, the research base examining safety and efficacy of pharmacologic interventions is sparse and inadequate. Systems issues, including graduate medical education systems, access to trained providers of EBTs for very young children, and coding, billing, and payment structures all interfere with access to effective interventions. Not insignificantly, social stigma related to mental health held by parents, primary care providers, and the greater society likely work against access to care for children.

#### **CONCLUSIONS**

The existing data demonstrate strong empirical support for family-focused interventions for young children with emotional, behavioral, and relationship problems, especially disruptive behavior disorders and anxiety or trauma exposure. By contrast, the empirical literature examining psychopharmacologic treatment is limited and highlights risks of adverse effects. A number of workforce and other barriers may contribute to the limited access.

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#### **ABBREVIATIONS**

AAP: American Academy of Pediatrics

ADHD: attention-deficit/hyperactivity disorder

EBT: evidence-based treatment
IYS: Incredible Years Series
PCIT: Parent Child Interaction
Therapy

SAMHSA: Substance Abuse and Mental Health Services Administration

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