



Addressing Early Childhood Emotional and Behavioral Problems

Mary Margaret Gleason, MD, FAAP, Edward Goldson, MD, FAAP, Michael W. Yogman, MD, FAAP, COUNCIL ON EARLY CHILDHOOD, COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS

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.¹ 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).² 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.^{3–13} 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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DOI: 10.1542/peds.2016-3025

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

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FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

To cite: Gleason MM, Goldson E, Yogman MW, AAP COUNCIL ON EARLY CHILDHOOD. Addressing Early Childhood Emotional and Behavioral Problems. *Pediatrics*. 2016;138(6):e20163025

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.^{28,29} 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’s-level 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.^{31–35}

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.³⁹

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 parent–child 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.^{45–47}

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.⁴⁸

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

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,^{22,53} 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.^{34,54} The New Forrester 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 Forrester Therapy, Helping the Noncompliant Child, and IYS also have proven efficacy in treating ADHD.^{35,55–57}

In the New Forrester 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.³⁵ Triple P is a multilevel intervention that includes targeted treatment of children with disruptive behaviors.⁵⁵ 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,

TABLE 1 Evidence-Based Interventions Shown To Reduce Existing Disruptive Problems in Preschoolers

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)
New Forest ^{32,35}	30–77 mo	Children with ADHD	202	Yes	Yes	<ul style="list-style-type: none"> 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)
IYS parent training, teacher training, and child training ^{32,53,57–59}	3–8 y	Children with CD, ODD, and ADHD	677	Yes	No	<ul style="list-style-type: none"> 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 ^{55,60,61} (levels 3 and 4)	36–48 mo	Children at high risk with parental concerns about behavioral difficulties (level 4)	330	Yes	Yes	<ul style="list-style-type: none"> Multiple levels of intervention Primarily training parents with some opportunities to observe parent-child interactions Handouts and homework supplement the treatment 	<ul style="list-style-type: none"> 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 ⁶²	No	Yes (level 3: 0.69, level 4: 0.96; lower for children <4 y) ⁶³
Triple P online ⁵⁹	2–9 y	Children with CD and ODD	116	No	No	<ul style="list-style-type: none"> 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)

TABLE 1 Continued

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)
PCIT ^{57,65,65}	2-7 y	Children with clinical level disruptive behavior symptoms	358	Yes, minimal	Yes	<ul style="list-style-type: none"> • Through a 1-way mirror, therapist coaches parent during in vivo interactions with child • Homework requires parent-child interactions • Progress through therapy determined by parents' skill development 	Depends on parent skill development	Up to 6 y after treatment, fewer signs of disruptive behavior disorder than baseline	Minimal	Yes (1.45) ³⁸
Helping the Noncompliant Child ⁶⁷	3-8 y	Children with noncompliant behaviors	350	Yes	Yes	<ul style="list-style-type: none"> • 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 mo	Effect size 1.24; inattention 1.09; hyperactivity/impulsivity: 1.21	Yes (but no ES reported)

n/a, not available; ECBI, Eyberg Child Behavior Inventory; SDQ, Strengths and Difficulties Questionnaire; CD, conduct disorder; ODD, oppositional defiant disorder.

in which groups of parents learn effective strategies, practice with each other, and discuss clinical vignettes presented on videos.⁵⁶ 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.⁶⁷ 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.⁶⁸ 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 with 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 trauma-exposed 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.^{70,71} Effects are sustained for up to a year after treatment.^{71,72} Child–parent psychotherapy is similarly effective in treating children exposed to trauma. Child–parent psychotherapy is an attachment-focused 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.⁴⁰ Child–parent psychotherapy is more effective in reducing child and parent trauma symptoms than supportive case management and community referral.⁷³ 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.⁷⁴ 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.^{60,76,77}

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.^{89,90} 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-health-initiatives/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 preschool-aged 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 relationship-focused 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.¹⁰³

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 **l**oyalty, using the

language the family uses about the concerns, and partnering with the family to develop a clearly stated plan, with the parents' permission.¹¹² 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 parent-child 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.¹¹⁵

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 short-term 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.

LEAD AUTHORS

Mary Margaret Gleason, MD, FAAP
Edward Goldson, MD, FAAP
Michael W. Yogman, MD, FAAP

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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

REFERENCES

1. Egger HL, Angold A. Common emotional and behavioral disorders in preschool children: presentation, nosology, and epidemiology. *J Child Psychol Psychiatry*. 2006;47(3-4):313–337
2. Myers SM, Johnson CP; American Academy of Pediatrics Council on Children With Disabilities. Management of children with autism spectrum disorders. *Pediatrics*. 2007;120(5):1162–1182
3. Kim-Cohen J, Arseneault L, Caspi A, Tomás MP, Taylor A, Moffitt TE. Validity of DSM-IV conduct disorder in 41/2-5-year-old children: a longitudinal epidemiological study. *Am J Psychiatry*. 2005;162(6):1108–1117
4. Harvey EA, Youngwirth SD, Thakar DA, Errazuriz PA. Predicting attention-deficit/hyperactivity

disorder and oppositional defiant disorder from preschool diagnostic assessments. *J Consult Clin Psychol*. 2009;77(2):349–354

5. Wilens TE, Biederman J, Brown S, et al. Psychiatric comorbidity and functioning in clinically referred preschool children and school-age youths with ADHD. *J Am Acad Child Adolesc Psychiatry*. 2002;41(3):262–268
6. Schwebel DC, Speltz ML, Jones K, Bardina P. Unintentional injury in preschool boys with and without early onset of disruptive behavior. *J Pediatr Psychol*. 2002;27(8):727–737
7. Pagliaccio D, Luby J, Gaffrey M, et al. Anomalous functional brain activation following negative mood induction in children with pre-school onset major depression. *Dev Cogn Neurosci*. 2012;2(2):256–267
8. Luby JL, Si X, Belden AC, Tandon M, Spitznagel E. Preschool depression: homotypic continuity and course over 24 months. *Arch Gen Psychiatry*. 2009;66(8):897–905
9. Briggs-Gowan MJ, Carter AS, Bosson-Heenan J, Guyer AE, Horwitz SM. Are infant-toddler social-emotional and behavioral problems transient? *J Am Acad Child Adolesc Psychiatry*. 2006;45(7):849–858
10. Briggs-Gowan MJ, Carter AS. Social-emotional screening status in early childhood predicts elementary school outcomes. *Pediatrics*. 2008;121(5):957–962
11. Lavigne JV, Arend R, Rosenbaum D, Binns HJ, Christoffel KK, Gibbons RD. Psychiatric disorders with onset in the preschool years: I. Stability of diagnoses. *J Am Acad Child Adolesc Psychiatry*. 1998;37(12):1246–1254
12. Leblanc N, Boivin M, Dionne G, et al. The development of hyperactive-impulsive behaviors during the preschool years: the predictive validity of parental assessments. *J Abnorm Child Psychol*. 2008;36(7):977–987
13. Gaffrey MS, Luby JL, Belden AC, Hirshberg JS, Volsch J, Barch DM. Association between depression severity and amygdala reactivity during sad face viewing in depressed preschoolers: an fMRI study. *J Affect Disord*. 2011;129(1-3):364–370

14. Wakschlag LS, Leventhal BL, Briggs-Gowan MJ, et al. Defining the “disruptive” in preschool behavior: what diagnostic observation can teach us. *Clin Child Fam Psychol Rev*. 2005;8(3):183–201
15. Luby JL, Mrakotsky C, Heffelfinger A, Brown K, Hessler M, Spitznagel E. Modification of DSM-IV criteria for depressed preschool children. *Am J Psychiatry*. 2003;160(6):1169–1172
16. Scheeringa MS, Zeanah CH, Myers L, Putnam F. Heart period and variability findings in preschool children with posttraumatic stress symptoms. *Biol Psychiatry*. 2004;55(7):685–691
17. Lahey BB, Applegate B. Validity of DSM-IV ADHD. *J Am Acad Child Adolesc Psychiatry*. 2001;40(5):502–504
18. Luby JL, Belden AC, Pautsch J, Si X, Spitznagel E. The clinical significance of preschool depression: impairment in functioning and clinical markers of the disorder. *J Affect Disord*. 2009;112(1-3):111–119
19. Tyrka AR, Burgers DE, Philip NS, Price LH, Carpenter LL. The neurobiological correlates of childhood adversity and implications for treatment. *Acta Psychiatr Scand*. 2013;128(6):434–447
20. Luking KR, Repovs G, Belden AC, et al. Functional connectivity of the amygdala in early-childhood-onset depression. *J Am Acad Child Adolesc Psychiatry*. 2011;50(10):1027–41.e3
21. Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med*. 1998;14(4):245–258
22. Lahey BB, Pelham WE, Loney J, et al. Three-year predictive validity of DSM-IV attention deficit hyperactivity disorder in children diagnosed at 4-6 years of age. *Am J Psychiatry*. 2004;161(11):2014–2020
23. Wakschlag LS, Leventhal BL, Thomas J, et al. Disruptive behavior disorders and ADHD in preschool children: Characterizing heterotypic continuities for a developmentally informed nosology for DSM-V. In: Rieger D, First MB, Narrow WE, eds. *Age and gender considerations in psychiatric diagnosis: A research agenda for DSM-V*. Arlington, VA: American Psychiatric Publishing, Inc.; 2007:243–258
24. Scheeringa MS. Post-Traumatic Stress Disorder. In: DelCarmen-Wiggins R, Carter A, eds. *Handbook of Infant, Toddler, and Preschool Mental Health Assessment USA*. Oxford, United Kingdom: Oxford University Press; 2004:377–397
25. Dong M, Giles WH, Felitti VJ, et al. Insights into causal pathways for ischemic heart disease: adverse childhood experiences study. *Circulation*. 2004;110(13):1761–1766
26. Shonkoff JP, Phillips D. *From neurons to neighborhoods: The science of early childhood development*. Washington, D.C.: National Academy Press; 2000
27. Garner AS, Shonkoff JP; Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; Section on Developmental and Behavioral Pediatrics. Early childhood adversity, toxic stress, and the role of the pediatrician: translating developmental science into lifelong health. *Pediatrics*. 2012;129(1). Available at: <http://pediatrics.aappublications.org/content/129/1/e224>
28. Committee On Child Health Financing. Scope of health care benefits for children from birth through age 26. *Pediatrics*. 2012;129(1):185–189
29. Weitzman C, Wegner L; American Academy of Pediatrics, Section on Developmental and Behavioral Pediatrics; Committee on Psychosocial Aspects of Child and Family Health; Council on Early Childhood; Society for Developmental and Behavioral Pediatrics. Promoting optimal development: screening for behavioral and emotional problems. *Pediatrics*. 2015;135(2):384–395
30. Mendelsohn AL, Valdez PT, Flynn V, et al. Use of videotaped interactions during pediatric well-child care: impact at 33 months on parenting and on child development. *J Dev Behav Pediatr*. 2007;28(3):206–212
31. Scheeringa MS, Salloum A, Arnberger RA, Weems CF, Amaya-Jackson L, Cohen JA. Feasibility and effectiveness of cognitive-behavioral therapy for posttraumatic stress disorder in preschool children: two case reports. *J Trauma Stress*. 2007;20(4):631–636
32. Sonuga-Barke EJ, Daley D, Thompson M, Laver-Bradbury C, Weeks A. Parent-based therapies for preschool attention-deficit/hyperactivity disorder: a randomized, controlled trial with a community sample. *J Am Acad Child Adolesc Psychiatry*. 2001;40(4):402–408
33. Gleason MM, Egger HL, Emslie GJ, et al. Psychopharmacological treatment for very young children: contexts and guidelines. *J Am Acad Child Adolesc Psychiatry*. 2007;46(12):1532–1572
34. Charach A, Dashti B, Carson P, et al; Agency for Healthcare Research and Quality. Attention deficit hyperactivity disorder: effectiveness of treatment in at-risk preschoolers; long-term effectiveness in all ages; and variability in prevalence, diagnosis, and treatment. *Comparative Effectiveness Review*. 2011;44: AHRQ Publication No. 12-EHC003-EF. Available at: www.effectivehealthcare.ahrq.gov/ehc/products/191/1818/CER44-ADHD_20111021.pdf. Accessed October 17, 2016
35. Thompson MJ, Laver-Bradbury C, Ayres M, et al. A small-scale randomized controlled trial of the revised new forest parenting programme for preschoolers with attention deficit hyperactivity disorder. *Eur Child Adolesc Psychiatry*. 2009;18(10):605–616
36. Riddle MA, Yershova K, Lazzaretto D, Paykina N, Yenokyan G, Greenhill L, et al. The preschool attention-deficit/hyperactivity disorder treatment study (PATS) 6-year follow-up. *J Am Acad Child Adolesc Psychiatry*. 2013;52(3):264–278.e2
37. Hood KK, Eyberg SM. Outcomes of parent-child interaction therapy: mothers’ reports of maintenance three to six years after treatment. *J Clin Child Adolesc Psychol*. 2003;32(3):419–429
38. Pediatric OCD Treatment Study (POTS) Team. Cognitive-behavior therapy, sertraline, and their combination for children and adolescents with obsessive-compulsive disorder: the Pediatric OCD Treatment Study (POTS) randomized controlled trial. *JAMA*. 2004;292(16):1969–1976

39. Wolraich M, Brown L, Brown RT, et al; Subcommittee on Attention-Deficit/Hyperactivity Disorder; Steering Committee on Quality Improvement and Management. ADHD: clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*. 2011;128(5):1007–1022
40. Lieberman AF, Van Horn P, Ippen CG. Toward evidence-based treatment: child-parent psychotherapy with preschoolers exposed to marital violence. *J Am Acad Child Adolesc Psychiatry*. 2005;44(12):1241–1248
41. Fraiberg S, Adelson E, Shapiro V. Ghosts in the nursery. A psychoanalytic approach to the problems of impaired infant-mother relationships. *J Am Acad Child Psychiatry*. 1975;14(3):387–421
42. Cicchetti D, Rogosch FA, Toth SL, Sturge-Apple ML. Normalizing the development of cortisol regulation in maltreated infants through preventive interventions. *Dev Psychopathol*. 2011;23(3):789–800
43. Toth SL, Rogosch FA, Manly JT, Cicchetti D. The efficacy of toddler-parent psychotherapy to reorganize attachment in the young offspring of mothers with major depressive disorder: a randomized preventive trial. *J Consult Clin Psychol*. 2006;74(6):1006–1016
44. Lieberman AF, Weston DR, Pawl JH. Preventive intervention and outcome with anxiously attached dyads. *Child Dev*. 1991;62(1):199–209
45. Dozier M, Peloso E, Lewis E, Laurenceau JP, Levine S. Effects of an attachment-based intervention on the cortisol production of infants and toddlers in foster care. *Dev Psychopathol*. 2008;20(3):845–859
46. Bernard K, Dozier M, Bick J, Lewis-Morrarty E, Lindhiem O, Carlson E. Enhancing attachment organization among maltreated children: results of a randomized clinical trial. *Child Dev*. 2012;83(2):623–636
47. Fisher PA, Burraston B, Pears K. The early intervention foster care program: permanent placement outcomes from a randomized trial. *Child Maltreat*. 2005;10(1):61–71
48. Van Zeijl J, Mesman J, Van IJzendoorn MH, et al. Attachment-based intervention for enhancing sensitive discipline in mothers of 1- to 3-year-old children at risk for externalizing behavior problems: a randomized controlled trial. *J Consult Clin Psychol*. 2006;74(6):994–1005
49. Murray L, Cooper PJ, Wilson A, Romanuk H. Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression: 2. Impact on the mother-child relationship and child outcome. *Br J Psychiatry*. 2003;182(5):420–427
50. Gunlicks ML, Weissman MM. Change in child psychopathology with improvement in parental depression: a systematic review. *J Am Acad Child Adolesc Psychiatry*. 2008;47(4):379–389
51. Weissman MM, Pilowsky DJ, Wickramaratne PJ, et al; STAR*D-Child Team. Remissions in maternal depression and child psychopathology: a STAR*D-child report. *JAMA*. 2006;295(12):1389–1398
52. Beardslee WR, Ayoub C, Avery MW, Watts CL, O'Carroll KL. Family Connections: an approach for strengthening early care systems in facing depression and adversity. *Am J Orthopsychiatry*. 2010;80(4):482–495
53. Keenan K, Wakschlag LS. Can a valid diagnosis of disruptive behavior disorder be made in preschool children? *Am J Psychiatry*. 2002;159(3):351–358
54. SAMHSA. National registry of evidence-based programs and practices. Available at: <http://www.samhsa.gov/nrepp>. Accessed October 17, 2016
55. Bodenmann G, Cina A, Ledermann T, Sanders MR. The efficacy of the Triple P-Positive Parenting Program in improving parenting and child behavior: a comparison with two other treatment conditions. *Behav Res Ther*. 2008;46(4):411–427
56. Webster-Stratton CH, Reid MJ, Beauchaine T. Combining parent and child training for young children with ADHD. *J Clin Child Adolesc Psychol*. 2011;40(2):191–203
57. Abikoff HB, Thompson MJ, Laver-Bradbury C, et al. Parent training for preschool ADHD: A randomized controlled trial of specialized and generic programs. *J Child Psychol Psychiatry*. 2015;56(6):618–631
58. Thomas R, Zimmer-Gembeck MJ. Behavioral outcomes of Parent-Child Interaction Therapy and Triple P-Positive Parenting Program: a review and meta-analysis. *J Abnorm Child Psychol*. 2007;35(3):475–495
59. Sanders MR, Baker S, Turner KM. A randomized controlled trial evaluating the efficacy of Triple P Online with parents of children with early-onset conduct problems. *Behav Res Ther*. 2012;50(11):675–684
60. Bor W, Sanders MR, Markie-Dadds C. The effects of the Triple P-positive Parenting Program on preschool children with co-occurring disruptive behavior and attentional/hyperactive difficulties. *J Abnorm Child Psychol*. 2002;30(6):571–587
61. Markie-Dadds C, Sanders MR. Self-directed Triple P (Positive Parenting Program) for mothers with children at-risk of developing conduct problems. *Behav Cogn Psychother*. 2006;34(3):259–275
62. Comer JS, Puliafico AC, Aschenbrand SG, et al. A pilot feasibility evaluation of the CALM Program for anxiety disorders in early childhood. *J Anxiety Disord*. 2012;26(1):40–49
63. Hirshfeld-Becker DR, Masek B, Henin A, et al. Cognitive behavioral therapy for 4- to 7-year-old children with anxiety disorders: a randomized clinical trial. *J Consult Clin Psychol*. 2010;78:498–510
64. Matos M, Bauermeister JJ, Bernal G. Parent-child interaction therapy for Puerto Rican preschool children with ADHD and behavior problems: a pilot efficacy study. *Fam Process*. 2009;48(2):232–252
65. Fernandez MA, Butler AM, Eyberg SM. Treatment outcome for low socioeconomic status African American families in parent-child interaction therapy: A pilot study. *Child Fam Behav Ther*. 2011;33(1):32–48
66. Webster-Stratton C, Rinaldi J, Jamila MR. Long-term outcomes of Incredible Years parenting program: Predictors of adolescent adjustment. *Child Adolesc Ment Health*. 2011;16(1):38–46

67. Gridley N, Hutchings J, Baker-Henningham H. The Incredible Years Parent-Toddler Programme and parental language: a randomised controlled trial. *Child Care Health Dev.* 2015;41(1):103–111
68. Chaffin M, Funderburk B, Bard D, Valle LA, Gurwitsch R. A combined motivation and parent-child interaction therapy package reduces child welfare recidivism in a randomized dismantling field trial. *J Consult Clin Psychol.* 2011;79(1):84–95
69. Forehand R, Parent J, Sonuga-Barke E, Peisch VD, Long N, Abikoff HB. Which type of parent training works best for preschoolers with comorbid ADHD and ODD? A secondary analysis of a randomized controlled trial comparing generic and specialized programs. *J Abnorm Child Psychol.* 2016;44(8):1503–1513
70. Cohen JA, Mannarino AP. A treatment outcome study for sexually abused preschool children: initial findings. *J Am Acad Child Adolesc Psychiatry.* 1996;35(1):42–50
71. Scheeringa MS, Weems CF, Cohen JA, Amaya-Jackson L, Guthrie D. Trauma-focused cognitive-behavioral therapy for posttraumatic stress disorder in three-through six year-old children: a randomized clinical trial. *J Child Psychol Psychiatry.* 2011;52(8):853–860
72. Cohen JA, Mannarino AP. A treatment study for sexually abused preschool children: outcome during a one-year follow-up. *J Am Acad Child Adolesc Psychiatry.* 1997;36(9):1228–1235
73. Lieberman AF, Ghosh Ippen C, VAN Horn P. Child-parent psychotherapy: 6-month follow-up of a randomized controlled trial. *J Am Acad Child Adolesc Psychiatry.* 2006;45(8):913–918
74. Luby J, Lenze S, Tillman R. A novel early intervention for preschool depression: findings from a pilot randomized controlled trial. *J Child Psychol Psychiatry.* 2012;53(3):313–322
75. Connolly SD, Bernstein GA; Work Group on Quality Issues. Practice parameter for the assessment and treatment of children and adolescents with anxiety disorders. *J Am Acad Child Adolesc Psychiatry.* 2007;46(2):267–283
76. Shepard SA, Dickstein S. Preventive intervention for early childhood behavioral problems: an ecological perspective. *Child Adolesc Psychiatr Clin N Am.* 2009;18(3):687–706
77. Nock MK, Ferriter C. Parent management of attendance and adherence in child and adolescent therapy: a conceptual and empirical review. *Clin Child Fam Psychol Rev.* 2005;8(2):149–166
78. Olfson M, Crystal S, Huang C, Gerhard T. Trends in antipsychotic drug use by very young, privately insured children. *J Am Acad Child Adolesc Psychiatry.* 2010;49(1):13–23
79. Wilson DO. Child's ordeal shows risks of psychosis drugs for young. *New York Times.* September 2, 2010:A1.
80. Zuvekas SH, Vitiello B, Norquist GS. Recent trends in stimulant medication use among U.S. children. *Am J Psychiatry.* 2006;163(4):579–585
81. Zito JM, Safer DJ, Valluri S, Gardner JF, Korelitz JJ, Mattison DR. Psychotherapeutic medication prevalence in Medicaid-insured preschoolers. *J Child Adolesc Psychopharmacol.* 2007;17(2):195–203
82. Cooper WO, Hickson GB, Fuchs C, Arbogast PG, Ray WA. New users of antipsychotic medications among children enrolled in TennCare. *Arch Pediatr Adolesc Med.* 2004;158(8):753–759
83. Fontanella CA, Hiance DL, Phillips GS, Bridge JA, Campo J. Trends in psychotropic medication utilization for medicaid-enrolled preschool children. *J Child Fam Stud.* 2014;23(4):617–631
84. Rappley MD, Mullan PB, Alvarez FJ, Eneli IU, Wang J, Gardiner JC. Diagnosis of attention-deficit/hyperactivity disorder and use of psychotropic medication in very young children. *Arch Pediatr Adolesc Med.* 1999;153(10):1039–1045
85. Rappley MD, Eneli IU, Mullan PB, et al. Patterns of psychotropic medication use in very young children with attention-deficit hyperactivity disorder. *J Dev Behav Pediatr.* 2002;23(1):23–30
86. Greenhill L, Kollins S, Abikoff H, et al. Efficacy and safety of immediate-release methylphenidate treatment for preschoolers with ADHD. *J Am Acad Child Adolesc Psychiatry.* 2006;45(11):1284–1293
87. Kratochvil CJ, Vaughan BS, Stoner JA, et al. A double-blind, placebo-controlled study of atomoxetine in young children with ADHD. *Pediatrics.* 2011;127(4). Available at: <http://pediatrics.aappublications.org/content/127/4/e862>
88. Egger H. A perilous disconnect: antipsychotic drug use in very young children. *J Am Acad Child Adolesc Psychiatry.* 2010;49(1):3–6
89. Correll CU, Carlson HE. Endocrine and metabolic adverse effects of psychotropic medications in children and adolescents. *J Am Acad Child Adolesc Psychiatry.* 2006;45(7):771–791
90. Luby J, Mrakotsky C, Stalets MM, et al. Risperidone in preschool children with autistic spectrum disorders: an investigation of safety and efficacy. *J Child Adolesc Psychopharmacol.* 2006;16(5):575–587
91. Horwitz SM, Leaf PJ, Leventhal JM. Identification of psychosocial problems in pediatric primary care: do family attitudes make a difference? *Arch Pediatr Adolesc Med.* 1998;152(4):367–371
92. Horwitz SM, Gary LC, Briggs-Gowan MJ, Carter AS; Do Needs Drive Services Use in Young Children. Do needs drive services use in young children? *Pediatrics.* 2003;112(6 Pt 1):1373–1378
93. Accreditation Council for Graduate Medical Education. ACGME program requirements for graduate medical education in Pediatrics. Available at: www.acgme.org/Portals/0/PFAssets/ProgramRequirements/320_pediatrics_2016.pdf. Accessed October 17, 2016
94. Committee on Psychosocial Aspects of Child and Family Health and Task Force on Mental Health. Policy statement--The future of pediatrics: mental health competencies for pediatric primary care. *Pediatrics.* 2009;124(1):410–421
95. Jensen PS, Goldman E, Offord D, et al. Overlooked and underserved: "action signs" for identifying children with unmet mental health needs. *Pediatrics.* 2011;128(5):970–979
96. Cohen J, Oser C, Quigley K Making it happen: overcoming barriers to

- providing infant-early childhood mental health. Available at: www.zerotothree.org/resources/511-making-it-happen-overcoming-barriers-to-providing-infant-early-childhood-mental-health
97. Thomas CR, Holzer CE III. The continuing shortage of child and adolescent psychiatrists. *J Am Acad Child Adolesc Psychiatry*. 2006;45(9):1023–1031
 98. Kautz C, Mauch D, Smith SA. *Reimbursement of Mental Health Services in Primary Care Settings*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration; 2008
 99. The Lewin Group. *Accessing Children's Mental Health Services in Massachusetts: Workforce Capacity Assessment*. Boston, MA: Blue Cross; 2009
 100. Jellinek M, Little M. Supporting child psychiatric services using current managed care approaches: you can't get there from here. *Arch Pediatr Adolesc Med*. 1998;152(4):321–326
 101. Kelleher KJ, Campo JV, Gardner WP. Management of pediatric mental disorders in primary care: where are we now and where are we going? *Curr Opin Pediatr*. 2006;18(6):649–653
 102. American Academy of Child and Adolescent Psychiatry Committee on Health Care Access and Economics Task Force on Mental Health. Improving mental health services in primary care: reducing administrative and financial barriers to access and collaboration. *Pediatrics*. 2009;123(4):1248–1251
 103. Zero to Three. *Diagnostic Classification of Mental Health and Developmental Disorders in Infants and Young Children*. Washington, DC: Zero to Three; in press
 104. dosReis S, Barksdale CL, Sherman A, Maloney K, Charach A. Stigmatizing experiences of parents of children with a new diagnosis of ADHD. *Psychiatric Services*. 2010;61(6):811–816
 105. Harwood MD, O'Brien KA, Carter CG, Eyberg SM. Mental health services for preschool children in primary care: a survey of maternal attitudes and beliefs. *J Pediatr Psychol*. 2009;34(7):760–768
 106. Pescosolido BA. Culture, children, and mental health treatment: special section on the national stigma study-children. *Psychiatr Serv*. 2007;58(5):611–612
 107. Pescosolido BA, Jensen PS, Martin JK, Perry BL, Olafsdottir S, Fettes D. Public knowledge and assessment of child mental health problems: findings from the National Stigma Study-Children. *J Am Acad Child Adolesc Psychiatry*. 2008;47(3):339–349
 108. Sayal K, Tischler V, Coope C, et al. Parental help-seeking in primary care for child and adolescent mental health concerns: qualitative study. *Br J Psychiatry*. 2010;197(6):476–481
 109. Steele MM, Lochrie AS, Roberts MC. Physician identification and management of psychosocial problems in primary care. *J Clin Psychol Med Settings*. 2010;17(2):103–115
 110. American Academy of Pediatrics Council on Children with Disabilities. Care coordination in the medical home: integrating health and related systems of care for children with special health care needs. *Pediatrics*. 2005;116(5):1238–1244
 111. Wissow L, Anthony B, Brown J, et al. A common factors approach to improving the mental health capacity of pediatric primary care. *Adm Policy Ment Health*. 2008;35(4):305–318
 112. Foy JM, Kelleher KJ, Laraque D; American Academy of Pediatrics Task Force on Mental Health. Enhancing pediatric mental health care: strategies for preparing a primary care practice. *Pediatrics*. 2010;125(suppl 3):S87–S108
 113. Berkovits MD, O'Brien KA, Carter CG, Eyberg SM. Early identification and intervention for behavior problems in primary care: a comparison of two abbreviated versions of parent-child interaction therapy. *Behav Ther*. 2010;41(3):375–387
 114. Perrin EC, Sheldrick RC, McMenamy JM, Henson BS, Carter AS. Improving parenting skills for families of young children in pediatric settings: a randomized clinical trial. *JAMA Pediatr*. 2014;168(1):16–24
 115. Hilt RJ, McDonnell MG, Thompson J, et al. Telephone consultation assisting primary care child mental health. In: *55th National Meeting of the American Academy of Child and Adolescent Psychiatry*; October 28–November 2, 2008; Chicago, IL.
 116. Kolko DJ, Campo JV, Kilbourne AM, Kelleher K. Doctor-office collaborative care for pediatric behavioral problems: a preliminary clinical trial. *Arch Pediatr Adolesc Med*. 2012;166(3):224–231
 117. Fox RA, Keller KM, Grede PL, Bartosz AM. A mental health clinic for toddlers with developmental delays and behavior problems. *Res Dev Disabil*. 2007;28(2):119–129

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CHILD AND FAMILY HEALTH and SECTION ON DEVELOPMENTAL AND
BEHAVIORAL PEDIATRICS

Pediatrics 2016;138;

DOI: 10.1542/peds.2016-3025 originally published online November 21, 2016;

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Pediatrics 2016;138;

DOI: 10.1542/peds.2016-3025 originally published online November 21, 2016;

The online version of this article, along with updated information and services, is located on the World Wide Web at:

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