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Addressing the Developmental and Mental Health Needs of Young Children in Foster Care

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Abstract

Research over the past two decades has consistently documented the high rates of young children entering the child protective services/child welfare system with developmental and mental health problems. There is an emerging evidence base for the role of early intervention services in improving outcomes for children with developmental and mental health problems in the general population that heavily relies on accurate and appropriate screening and assessment practices. The Child Welfare League of America, the American Academy of Pediatrics, and the American Academy of Child and Adolescent Psychiatry have all published guidelines concerning the importance of comprehensive assessments and appropriate referral to early intervention services for children entering out-of-home care. Recent federal legislation (P.L. 108–36) calls for increased collaboration between child welfare and public agencies to address the developmental and mental health needs of young children in foster care. This paper provides a framework for health, developmental, and mental health professionals seeking to partner with child welfare to develop and implement programs addressing these critical issues.

Index terms

foster care; developmental delay; mental health; child protective services; early intervention

There are more than 580,000 children[1] in the U.S. foster care system; these children represent an important and vulnerable subpopulation of youths. Especially disconcerting is the fact that a large proportion (30%) of these children are younger than 5 years of age.[2] Many children enter foster care during the early years of life when neurological development is most active and vulnerable.[3–6] Experiences before entry and while in foster care have the potential to dramatically affect a child's short- and long-term development and their emotional well-being.[7,8]

It is not surprising that studies have found disproportionately high rates of developmental and mental health problems among children in foster care.[9,10] These problems can have tragic and costly sequelae, including frequent placement failures, academic difficulties, increased high

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school dropout rates, and later delinquency.[11–15] A large proportion of children enter the foster care system at ages of developmental malleability, conceptualized as ranging from 0 to 5 years.[16] There is a growing body of scientific evidence pointing to the potential of early intervention for the amelioration of developmental and behavioral problems in young children before such detrimental consequences occur.[17–19]

The theoretical importance of identifying young children with developmental and behavioral problems and linking them to services has been recognized by a number of professional organizations including the American Academy of Pediatrics (AAP),[20,21] the Child Welfare League of America,[22] and the American Academy of Child and Adolescent Psychiatry (AACAP).[23] The AAP guidelines, first issued in 1994 and reissued in 2002, recommend that all children receive initial health and mental health screening examinations within 72 hours of entering the foster care system and that all children further receive comprehensive physical, mental health, and developmental evaluations within 30 days of placement.[20,21] Within 60 days, each child should have an individualized health care plan that identifies health, mental health, and developmental needs and documents initial treatment and referrals to appropriate services. Ongoing monitoring of the physical, developmental, and mental health status of children in foster care is also recommended to occur at rates more frequently than those suggested for nonfoster peers.[20,21,24] The Child Welfare League and the AACAP have collaborated in developing a policy for the mental health care of foster care children that emphasizes prevention and early intervention, particularly in the youngest subpopulation of children in care.[23]

The importance of collaboration between social welfare agencies and health, developmental, and mental health professionals was also recently recognized by the federal government. The "Keeping Children and Families Safe" Act (P.L. 108–36) was authorized in June 2003 and amends the "Child Abuse Prevention and Treatment" Act (P.L. 93–247) of 1974. This act specifically addresses the importance of prevention and treatment services for young children in foster care through collaborations between child welfare and public health, developmental disability and mental health agencies.[25] This amendment provides a unique opportunity for physical and mental health clinicians and developmental professionals to work together with social welfare agencies in effecting positive outcomes for this high-risk population. Importantly, while new legislation provides a unique opportunity for agencies to work together, the reality is that substantial barriers exist to providing such collaborative care. In addition, there are numerous limitations in the conceptualization and evaluative research of collaborative service delivery models.

This paper provides a multisector framework for professionals seeking to partner with child welfare and other service sectors that address children's health problems (i.e., education, primary care, mental health), to develop programs targeting these critical issues. We begin by examining the rates of developmental and behavioral problems in young children entering foster care, service systems currently available to meet their needs, and the status of service use among children in need. We also explore approaches used by several innovative programs to address the developmental and mental health needs of children in care. Last, we review a framework that can be used to guide the development of community-based initiatives to improve outcomes for children in foster care. This framework is presented within the context of the ongoing struggle to provide best practice in assessment and treatment in the face of limited resource availability.

RECOGNIZING DEVELOPMENTAL AND BEHAVIORAL PROBLEMS AMONG CHILDREN IN FOSTER CARE

Why Are These Children at Risk?

The first step toward addressing the developmental and behavioral concerns of children in foster care is to understand the scope of problems that they experience. The high rates of developmental and behavioral problems in this population are thought to reflect multiple factors. First, children with developmental and emotional disabilities have an increased vulnerability to maltreatment. Second, many of these children display a number of documented environmental risk factors for developmental and behavioral problems. Before their placement in care, these children have been abused or neglected; many have been raised in environments of poverty or violence. Compared with their peers, they are more likely to have parents with mental illness or drug/alcohol dependency, to have been exposed to prenatal infection and maternal substance abuse in utero, and to have received inadequate preventive health care.[26–29] Third, most have experienced poor parenting strategies. One of the most widely researched conceptual models explaining the risk for mental health and developmental problems in young children is Patterson's[30] microsocial coercion hypothesis, which focuses on the parent/care-giver–child interaction. Numerous studies have been conducted at the Oregon Social Learning Center by Patterson and colleagues that suggest that the development of social, emotional, and behavioral problems in children is due to deficient family management skills characterized by harsh and inconsistent discipline, low levels of supervision and involvement in the child's life, and lack of appropriate prosocial reinforcement. Although these studies have not primarily focused on children in foster care, children removed from their homes have often experienced inappropriate parenting involving abuse and neglect. Fourth, the experiences of abuse and neglect, coupled with multiple placement changes, can further exacerbate or alter a child's developmental trajectory. For instance, exposure to early adversity can result in compromised neural system function, which is responsible for stress reactivity and self-regulation, each of which are crucial to development.[16] Ultimately these adverse experiences may hinder or prevent a child at risk from reaching developmental milestones within normal limits. On removal from their homes, many children in foster care go on to experience psychological difficulties prompted by feelings of rejection, guilt, anger, abandonment, and shame.[31] Preexisting attachment problems may be further aggravated by frequent placement changes and the uncertainties inherent in the foster care system.[32]

Prevalence Rates of Developmental Delay and Behavioral Problems in Foster Care

Not surprisingly, rates of developmental delay and behavioral problems for this population are much higher than those found in the general population. In contrast to the estimated 4% to 10% prevalence of developmental delay among children in the general population,[33,34] published rates of delay among young children in foster care are reported to be as high as 60%, with 57% exhibiting language delays, 33% showing cognitive problems, 31% displaying gross motor difficulties, and 10% experiencing growth problems.[28,35–41] Psychiatric problems are also more common among children in foster care compared with normative samples, even when contrasted with children from similar sociodemographic backgrounds.[42,43] Studies report as many as 25% to 40% of children younger than the age of 6 years entering out-of-home care have significant behavioral problems, with the majority displaying externalizing behaviors.[40,44,45] This greatly exceeds the overall prevalence rate of behavioral issues in the general population of preschoolers, which has been estimated between 3% and 6%.[46,47] Each of these studies has limitations. Typically, these studies have used regionally based samples, have drawn on clinical data from specialized assessment clinics, and have measured a child's health, development, and mental health status relatively soon after removal from his or her home. Thus, it is possible that these studies may be biased by selection processes.

The National Survey of Child and Adolescent Well-being (NSCAW), authorized under the Balanced Budget Act of 1997, provides current, highly reliable, and comprehensive national data regarding the proportions of young children in foster care at risk of developmental and mental health problems. Using a national probability sampling frame, the study identified 5501 children referred to child welfare for investigation of possible abuse or neglect. Of these, 641 children were younger than the age of six years and placed in out-of-home care. Children were administered standardized tools across four domains of development: (1) developmental/ cognitive status (Batelle Developmental Inventory: cognitive domain [ages 0–4 years], Kaufman Brief Intelligence Test [ages 4–5 years]); (2) language and communication (Preschool Language Scales-3 [all ages]); (3) sociobehavioral functioning (Child Behavior Checklist [ages 18 months to 5 years], Social Skills Rating Scale: Prosocial Scale [ages 3–5 years]); and (4) adaptive behavior (Vineland Adaptive Behavior Scales [all ages]). Risk status was determined when a child performed at least 2 SD below the mean or above the clinical cut point on one or more of the measures, as these scores warrant a further evaluation for early intervention services in most programs in the United States. Assessments were completed approximately 5 months after contact with child welfare, so that the immediate upheaval associated with removal from the home was much less likely to affect test scores than in previous research.

Importantly, results from the NSCAW study confirm findings from the regional studies described above. On cognitive tests, 26.8% of children ages 0–2 years and 13.6% of children ages 3–5 years scored ≥2 SD below the mean. Language and communication also demonstrated risk with 6.3% of children ages 0–2 years and 15.4% of children ages 3–5 years scoring ≥2 SD below the mean. Behavioral problems were common, with 55.7% of children age 2 and 38.5% of children ages 3–5 scoring in the clinical range on the Child Behavior Checklist and 8.4% of 3–5 year olds demonstrating risk on the Social Skills Rating Scale. Adaptive behaviors were also affected with 10.1% of 0–2 year olds and 13.6% of 3–5 year olds receiving an at risk score. Overall, more than 11% of children 0–2 years of age and 35% of children 3–5 years of age were found to be at risk in at least one domain (Stahmer et al, unpublished), despite the fact that a stringent cutoff was used and no measures of chronic medical problems related to developmental delay were available. These rates of developmental and behavioral problems can thus be seen as conservative estimates of need for this population.

Implications of Developmental Delay and Behavioral Problems

The overwhelming prevalence of developmental and behavioral problems among young children in foster care has significant implications for both the child welfare system and society as a whole. Behavioral problems, for example, have been associated with increased placement disruptions.[12] Both developmental and behavioral impairments have been correlated with longer lengths of stay in care[37,48] and a reduced likelihood of family reunification or adoption.[49,50] Early developmental and behavioral problems are also predictive of failure to finish high school and other school-related problems,[11,15] as well as adolescent engagement in delinquent and violent activities, risky sexual behaviors, and suicidal/self-mutilating behaviors.[13]

To further complicate matters, developmental and behavioral problems often co-occur, which can markedly alter the behavioral correlates, developmental trajectory, and treatment response of young children. For example, the association between early speech/language delays and behavioral and emotional disturbance in the general population has been well documented,[51–53] with 50% of significantly language-delayed school-aged children also having diagnosable psychopathology.[54] Although not extensively studied in children in foster care, the overlapping nature of developmental and behavioral problems may have far reaching consequences with respect to placement experiences in foster care and personal outcomes. Placement changes, the strongest predictor of which is behavioral problems,[54] disrupt the

child's identity development,[55] and exacerbate difficulties forming attachments.[56] Placement disruptions often lead to frequent school problems and discontinuities in education, resulting in a pattern of falling behind and an increased risk of academic failure.[14]

The financial costs of developmental and behavioral problems among children in foster care are enormous. Taking into account all local, state, and federal funding sources in the year 2000,[57] the total yearly cost of maintaining a child in the child welfare system can be estimated at nearly $35,000. Given the fact that children with developmental and/or behavioral problems are more likely to remain in and move around within the child welfare system,[57] these children may represent one of the most costly subsectors of youths in care. Furthermore, developmental and behavioral problems amenable to early intervention but not treated among children in the general population are related to additional societal costs estimated at more than $100,000 per child.[58] This estimate includes educational and economic costs and costs associated with criminality.

DEVELOPMENTAL AND MENTAL HEALTH SERVICE USE FOR CHILDREN IN FOSTER CARE

Available Publicly Funded Programs

Fortunately, there are a number of publicly funded programs (federal and state initiatives) for young children in foster care that address these types of problems (Table 1). The Education of the Handicapped Act Amendments (P.L. 99–457), passed in 1986, brought about significant changes for handicapped infants, toddlers, and preschoolers from birth to age 5 years; recent amendments under Part C of the Individuals with Disabilities Act (IDEA) provide early intervention services and preschool programs for these children. Similarly, the Preschool Grants Program, a preschool special education system mandated under Part B of IDEA, provides coverage for services to children ages 3 and 4 years with developmental disabilities. Medicaid is also available to provide medical assistance to individuals and families with low income and limited resources. While a number of commercial plans have limited their coverage of developmental services, Medicaid's Early Periodic Screening, Diagnosis, and Treatment (EPSDT) Program mandates that early treatment of problems and disorders revealed on a comprehensive examination be provided to all eligible children younger than the age of 21 years. Given the high proportions of children in foster care covered by Medicaid,[59] EPSDT can provide an important avenue for accessing services. Title IV provides funding for special services within child welfare systems. Additional agencies serving children in foster care include Title XX social services programs, Title V maternal and child health programs, and other state-mandated programs. Last, state public mental health services and state-specific divisions addressing developmental disabilities are programs that may also serve high numbers of foster care children.

Program Service Use for Children in Foster Care

Despite nationally publicized guidelines, documented high rates of need, and the availability of federal and state programs, there appears to be a gross discrepancy between the number of children with developmental and/or mental health care needs and the number of children who actually receive related services. The NSCAW study reported above examined service use across three sectors: education, mental health, and primary care. Results from this study demonstrated that only half of children ages 0–5 years deemed at high risk of developmental and behavioral problems had received educational, mental health, or primary care services over a 12-month period after initial contact with child welfare; infants 0–2 years old demonstrated the most unmet need, with only 27.9% designated high risk accessing services (Stahmer et al, unpublished).

These national findings echo results from regional studies. A study of mental health evaluations for children in the Los Angeles foster care system found that only 48% of children with psychiatric diagnoses amenable to pharmacological intervention had received any psychotropic medications in the previous year.[60] Data from San Diego County suggests that only the most severely developmentally delayed or mentally ill young children are referred for assessment, whereas children with less conspicuous delays or behavioral problems are frequently missed.[38] Other studies indicate that even when recommendations for specialty medical evaluations are deemed "urgent," many children do not receive them early enough to prevent detrimental outcomes.[28]

Why the Disparity Between Service Need and Service Use?

Several potential barriers to service use as well as possible solutions that have been described in the literature are detailed in Table 2 and are described below. These barriers fall under several broad categories: poor identification of children with need, difficulties ensuring children access available services, effectiveness of intervention services received, and little to no formalized use of foster parents as therapeutic interventionists for children with developmental or behavioral problems.

The poor identification of children in foster care with need has been the recent subject of a series of articles in the research and lay literature. Despite documented high rates of need and published guidelines, many locations may not screen for these types of problems when a child's case is opened. In a national probability sample of child welfare agencies, researchers found that, although more than 94% of agencies had policies regarding the assessment of all children entering foster care for physical health problems, only 47.8% had inclusive policies for mental health assessments and only 57.8% had inclusive policies for developmental assessments.[61] More than 30% of agencies analyzed had no policies for either mental health or developmental assessments of children entering care. Overall, only 58.7% of agencies reported that children actually received an entry screening, with those agencies having comprehensive policies screening the highest numbers of children. These findings regarding the limited implementation of the Child Welfare League of America and AAP guidelines for comprehensive assessments parallel those published in a recent 2002 report in the lay literature from the UCLA Center for Healthier Children, Families, and Communities.[62]

A second barrier to identification of children with developmental or mental health problems is the accuracy of conducted assessments. Research shows that community health care providers are more likely to identify/refer children entering foster care for evaluation and treatment of physical health and educational concerns but that they less consistently identify developmental and mental health problems compared with specialists at formal assessment centers.[31] This may relate to the lack of use of formalized screening tools. In the national study outlined above, only 25% of the surveyed agencies with comprehensive screening policies required the use of a specific screening tool or instrument to identify impaired children. It is not known what screening tools, if any, the remaining 75% were using. Since many of the agencies studied relied on primary caregivers to conduct their screenings,[61] and most physicians depend on clinical judgment rather than screening tools to identify children with developmental and/or behavioral problems,[17] one may assume that this was the case in screening most, if not all, of the children in this majority group. Nonuse of screening tools is problematic, as clinical judgment has been shown to detect less than one third of children with mental retardation, learning disabilities, language impairments, and other developmental disabilities.[17] Clinical judgment also identifies less than 50% of children with severe emotional and behavioral disturbances.[17]

Once a child is identified with problems, other barriers unique to foster care may make it difficult to link that child to available services. This may result from poor communication

between social workers, foster parents, and health care providers.[63] Battistelli[64] also suggested that, although a number of adults are involved in a foster child's care, the lack of a clearly identified case manager can mean that no one individual takes ultimate responsibility for ensuring that a child accesses services. Obtaining a signed consent to begin intervention in the child welfare system is an additional barrier to initiation of care. In many cases, biological caregivers are difficult to locate or are unwilling to cooperate with agencies on issues regarding their children; in addition, one agency may not recognize consent for services obtained by another public agency.[65] Another barrier to accessing services is the frequent placement changes that many children experience. Placement changes can result in incomplete transfer of information, new timelines and policies for assessment and intervention, and poor tracking of previous services received.[66] Last, while the recent amendments to Child Abuse Prevention and Treatment Act suggest a federal mandate for increased collaboration in the health, developmental, and mental health needs of children in foster care, the fiscal reality for most states is one of decreased funding for health and education.[67]

Even if a child receives an assessment and is linked to services, there is no assurance that a child will receive an evidence-based intervention and that a child's outcomes will improve. There is some empirical support for the efficacy of early intervention services for children in the general population;[18,19,39,68] children receiving early intervention services are more likely to complete high school, maintain jobs, live independently, and avoid teenage pregnancy and delinquency.[17] Such favorable outcomes appear to occur independently of the child's biological or socioenvironmental risk background.[69,70] Furthermore, other studies indicate that the effects of early intervention are most profound for children who are significantly underprivileged.[22] This consideration bears relevance to the high-risk children in foster care; one study in California found that 80.4% of infants entering foster care came from impoverished environments,[27] and another study in Illinois found that 60% of children entering foster care came from families on welfare at the time of placement or who had recently been on welfare.[71]

Despite this body of evidence, there are reasons to be concerned that accessing services may not necessarily result in improved outcomes. First, there is debate about the strength and maintenance of effects for cognitive development and especially for emotional development of early intervention services.[19] Second, there have been few well-designed studies specifically addressing the impact of early intervention services for children in foster care. Last, all the published programs provided high doses of the early intervention services over an extended period of time; the current fiscal situation results in limited availability and intensity of important intervention services, which may curtail the effectiveness of early intervention programs.

The fourth category of barriers to the identification and treatment of developmental and behavioral problems in young children in foster care is the lack of recognition that foster parents may themselves serve as therapeutic agents. Several researchers have suggested that training foster parents may improve outcomes for children in foster care.[71–74]

ADDRESSING THE PROBLEM

Models of Care

Faced with such numerous and complicated barriers to the identification and treatment of children in foster care with developmental and behavioral problems, it may seem daunting to even begin to address the special needs of this population. However, several programs across the country have attempted to tackle these issues through innovative and collaborative initiatives. Some have focused on identification of children with needs and on linkages to existing agencies; still others have worked on developing an evidence base for foster parents

as therapeutic agents in the developmental and behavioral care for children. In the next section, we review examples of programs that are examining these two different mechanisms for addressing the needs of young children in foster care. Sample solutions to barriers are summarized in Table 2.

Identification of Children with Need and Linkage to Existing Services

In recognition of the high prevalence and disturbing sequelae of developmental and behavioral problems among young children in foster care, many communities have begun to develop strategies for identifying and linking them to early intervention services. These approaches have usually been multidisciplinary and cross-agency in nature and have included social workers, public agencies, legal professionals, developmental psychologists, and health care professionals. They have been based on the premise that improved identification of children in foster care with need, coupled with good case management and referral to existing services, will improve access to care and ultimately improve outcomes.

The research literature includes multiple examples of multidisciplinary assessment and referral centers including, but not limited to, clinics established in Philadelphia,[75] Waterbury, CT,[76] Syracuse, NY,[35] Oakland,[77] Sacramento,[40] and San Diego.[38] In addition, the U.S. Department of Health and Human Services recently commissioned a report completed by the Georgetown University Child Development Center on state and community efforts to meet the health, developmental, and mental health needs of children in the foster care system.[78] Many of the approaches reported in the research and lay literature have used multidisciplinary teams and standardized tools to assess children's health, developmental, and mental health needs; identify community partners in public agencies mandated to serve children with these types of problems; and provide case management through social workers, public health nurses, or lay home visitors. Several have added other components, including advocating for changes in the state's judiciary system, providing education and training for professionals and foster caregivers, and developing memorandums of understanding across agencies to allow for shared information.

Alternatively, some communities have tried to ensure that children entering foster care are evaluated for possible problems and then linked to available services through the creation of policies and procedures to ensure that behavioral and developmental issues are tracked and monitored during the child's stay in out-of-home care. Several examples include health passports, placement coordinators, shared medical information systems, and centralized health management units within child welfare agencies.[78,79] The New York Checklist for the Healthy Development of Foster Children represents one example of this type of approach. Child welfare efforts directed toward the state's judiciary system were precipitated by research by the Judicial Commission on Justice for Children, which revealed that few court orders were being issued for services for children in foster care, service use in general was lacking, and only rarely were courts inquiring about the health status of children in care or their need for services.[80] These results prompted the Commission to create the Healthy Development for Children in Foster Care Initiative, a program that recognizes the power and authority of the courts to focus attention on a child's health and views every court proceeding as an opportunity to examine the needs of a child and the caregiver's ability to meet those needs.[80] Through the combined efforts of judges, lawyers, pediatricians, child advocates, and state and local officials, a ten-point checklist including developmental, mental health, and educational needs was established to help those involved in child welfare decision-making identify the health needs of children entering foster care (Table 3). In collaboration with the New York chapter of the American Academy of Pediatrics (AAP), a companion booklet (*Ensuring the Healthy Development of Foster Children: A Guide for Judges, Advocates and Child Welfare Professionals*) was also

developed to provide justification for each question on the checklist and references to expert sources.[80,81]

The primary challenge in discussing these approaches to the developmental and behavioral needs of children in foster care is the lack of rigorous data confirming the success of these programs. Information about such programs is typically descriptive in nature, published in the lay literature, and relies on process measures (numbers of children identified and linked to services) or anecdote (enhanced cooperation between agencies) in place of true outcomes measures. Even the recently published George-town report[82] relies primarily on process measures. One research paper did use a quasi-experimental design to compare differences between a comprehensive multidisciplinary program and customary community-based services with respect to identification of problems and subsequent service use. That study provides moderate support for the role of multidisciplinary assessment centers; providers at the program were more likely to identify children with developmental and mental health problems than the community providers and children seen at this program were more likely to be referred for and receive health services.[83] Another paper, looking specifically at mental health services for children in the toddler years through adolescence, found that those communities with stronger linkages between child welfare and mental health, were more efficient in linking children with mental health needs to services and in decreasing racial/ethnic disparities in service use.[84] While the evidence of the success of these collaborative programs in improving outcomes for children is limited, each of these programs represents important efforts addressing barriers to the identification of problems and linkage to services (Table 2).

Developing an Evidence Base for Foster Parents as Therapeutic Agents

Recent work has focused on the potential for using foster parents as an intervention agent to alter the adverse course of development for children in foster care. Ruff et al[85] proposed that the needs of children in foster care will be best met by shifting the focus from “foster care as maintenance” to “foster care as an active intervention.” This concept of the foster parent as a therapeutic intervention has implications for both behavioral problems and developmental delay. Conceptually, the quality of the adult-child interaction is a strong predictor of behavior[86,87] as well as language development and social communication.[88,89] By formally equipping foster parents to interact with children, foster care itself could function as an intervention. Hypothesized advantages of this type of approach include (a) increased positive outcomes through teaching and empowering foster parents to manage their child’s problems, (b) potential carryover to other children concurrently or sequentially in care with a trained foster parent, (c) more placement stability and less need to place children in higher cost special care settings (e.g., treatment foster homes, residential facilities), and (d) less foster parent turnover.

The literature regarding evidence-based interventions for foster parents is quite limited at this time. An early example of this type of work was described by Simms[90] in 1983. His Foster Parenting Center in Baltimore, MD included a once a week, 2-hour long preschool education program with conjoint foster parent support and training. However, only circumstantial evidence was available to assess its effectiveness.

The best studied program is the multidimensional treatment foster care model developed at the Oregon Social Learning Center in which foster parents are trained to provide a therapeutic milieu within the foster home. Controlled outcomes research comparing treatment foster care to other more restrictive community treatment alternatives suggest that it can contribute to successful outcomes for troubled latency-age youths.[91–98] Foster parent training in behavioral modification techniques targeting elementary school–age children with less severe problems has also been recently examined; preliminary results indicate that the program is effective in reducing behavioral problems in children in foster care and in decreasing placement changes

(Chamberlain et al, unpublished). Less work has been done with preschool children, although preliminary research evaluating the impact of a multidimensional treatment foster care model adapted to meet the needs of maltreated preschool children at entry to foster care suggests improved behavioral and developmental outcomes.[91,99,100] Additional research needs to be conducted to better understand and use the role of the foster parent in the developmental trajectory of a child in foster care.

ESTABLISHING A COMMUNITY-BASED PROGRAM

Improving Developmental and Behavioral Outcomes for Young Children in Foster Care

The developmental and mental health problems experienced by the majority of young children in foster care significantly affect the success of foster care placements and the ability of these children to contribute positively to their communities later in life. Intervention services in the general public are available through federally mandated programs, but systemic barriers to the delivery of such services continue to pose a problem for those seeking to improve outcomes for children in foster care. In addition, it is not clear whether available interventions are provided with sufficient intensity and duration to achieve successful outcomes for children in foster care.

It is our perspective that behavioral and developmental specialists can play a critical role in addressing these clinical and research needs. More programs should be developed that capitalize on the knowledge that a large proportion of children entering foster care are younger than the age 5 years, that these years represent the most critical period of neurological development, and that intervention efforts may play a crucial role in improving outcomes, reducing the number of failed placements, and improving the chances for permanency. Also, researchers need to be included as partners to study which types of programs work to improve these children's developmental trajectories.

The recent Child Abuse Prevention and Treatment Act legislation provides this opportunity to develop partnerships to address the needs of these vulnerable children. Creating programs to target the developmental and mental health needs of children in foster care will require the consideration of many logistical issues. Several broad questions need to be asked: (a) Who are the critical community partners to include in program development and financial support? (b) What will be the scope of the program? (c) How will an outcomes component be incorporated?

Who Are the Critical Community Partners with Regard to Program Development and Financial Support?

Program funding and development require partnerships between many public and private programs from different service sectors that are already available to serve children. The Medicaid program through Early Periodic Screening, Diagnosis, and Treatment, Parts C and B of the Individuals with Disabilities Act, developmental disability programs, and Title XX and V maternal and child health programs are all examples of public agencies that are mandated to serve vulnerable children. Another federal resource is the Title IV-E program, which provides reimbursement for some of the federally eligible foster care or adoption expenses that have been paid by the state. Creative use of funding obtained through this program can be either directly applied to the cost of early intervention services or can be used to liberate funds typically allocated to traditional foster care expenses for use in early intervention initiatives. Child welfare agencies may have some additional discretionary funds to apply to developing programs. Other partners may include local health, development, and mental health professional organizations as well as academic institutions. Community-based organizations, foundations, and private businesses may also provide important financial supports in these endeavors.

Where program development is concerned, the procedural success of existing programs has largely been attributed to identifying community partners and fostering a collaborative approach.[40,75,101] These partners are important for a number of reasons. First, many agencies are already mandated to evaluate and/or treat children with developmental and behavioral problems and thus provide critical staffing and funding. Second, agency members are often instrumental in the success of program advisory boards established to educate public sector service systems about the unique circumstances of children in child welfare, identify specific barriers to serving these children (e.g., placement changes and consent and confidentiality issues), and provide workable solutions. Last, such advisory boards have frequently played an important and unanticipated role in publicly holding agencies accountable to the collaborative process. Identifying and engaging critical stakeholders from these agencies, organizations, and potential donors at the local level are therefore the first steps in developing a successful program.

What Will Be the Scope of the Program?

At the outset, determining the scope of the program is essential to developing any evidence-based practice. Theoretically, children entering foster care need to be assessed for developmental and mental health problems and linked to effective intervention services. Important process questions to answer include what will be the scope of our program? Will we address health, developmental, and mental health problems for all children entering foster care or will we develop a staged implementation plan, limiting the scope of children served by type of problem, age, or geographic location? What types of services will be provided and by whom? Will we focus on identification and linkage to existing services or on the development of evidence-based interventions specific to this population? Where will these services occur? Can our community sustain a multidisciplinary assessment center or do we need to examine other models due to the large numbers of children served in our community (e.g., Los Angeles) or because of the ruralness of our community? How will we conceive the role of the foster parent? What specific barriers to service use exist in our community and how will we address them?

The AAP, American Academy of Child and Adolescent Psychiatry, and Child Welfare League of America guidelines provide important first steps for communities to consider, particularly related to the identification and monitoring of children's physical, developmental, and mental health status while in foster care. The recent report conducted by Georgetown also outlined 11 critical components for addressing these needs (Table 4). Their additional report, subtitled *Strategies for Implementation*, provides an excellent series of discussion questions for communities to engage in related to the implementation of each of the 11 components and is highly recommended as communities begin to plan their approach.[82]

Unfortunately, good guidelines in the literature to aid communities in making important decisions regarding the scope of a program are lacking. For example, there is no definitive answer regarding whether programs should simply screen children for problems or conduct a complete evaluation. Several researchers[40,102] have commented that, given the high rates of developmental delays and mental health problems in children in foster care, a complete evaluation is warranted for all children. They quote epidemiological sources stating that screening tools should only be used in situations in which there is a low rate of the targeted condition. Unfortunately, the cost of evaluation can be prohibitive for some programs. The literature does include several excellent reviews of available developmental and mental health assessment tools.[103–105] Similarly, the type of provider and location in which to conduct evaluations are not well answered in the literature. There is evidence suggesting that the use of a specialized clinic may provide for better identification of developmental and mental health needs of children.[83] However, these types of arrangements may not work in urban or heavily rural areas where satellite clinics and/or home visitors may be better suited logistically.[65,101]

It is our perspective that decision making regarding the scope of the program will need to be based on available services in the community, identified community and academic partners, and other community characteristics (e.g., urban, suburban, and rural). In addition, barriers to service use certainly vary across communities and solutions will need to be tailored to address a specific community's needs. Last, documentation of process and outcome measures will be essential to track the program's success and to disseminate findings with other communities also looking to implement Child Abuse Prevention and Treatment Act–related programs.

How Will an Outcomes Component Be Incorporated?

Without outcomes data, programs cannot ascertain their own strengths and shortcomings, making it difficult to appropriately revise their strategies to better meet the needs of the children being served. Moreover, from a financial perspective, it is difficult to obtain funding for a program modeled after one for which the evidence of success is either nonexistent or anecdotal at best. As we have already emphasized, there is a critical need to address the literature gap regarding evidence-based interventions for children in foster care with developmental and behavioral needs. Most of the community-based existing programs are often discussed only in the lay literature and have little published evidence to definitively prove their success.

For these reasons, we recommend the inclusion of outcome measurements in the development of any new program aimed at addressing the developmental and behavioral needs of children in foster care. Partnerships between community members and researchers can help to identify study designs and outcome measures appropriate for these vulnerable children and allow for the necessary examination as to whether available and/or experimental interventions improve the developmental and mental health status of young children in foster care.

SUMMARY

Young children in foster care frequently present with a complex array of developmental and behavioral problems. Taking the initiative to improve developmental and mental health outcomes of children in foster care is a challenging process. Due to the complexities inherent in the foster care system, programs seeking to implement strategies to improve developmental and mental health outcomes typically encounter unforeseen obstacles and face multiple setbacks during their development. As we have seen, however, many programs have made it through this process and can serve as models for the development of other such programs across the country. Additional studies determining the success of various early intervention services as applied specifically to children in foster care are needed. Given the vulnerability of young children in foster care and the enormous potential to change the course of their lives, the rewards are certainly worth the effort.

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Table 1

Federal Legislation and Programs Applicable to Young Children In Foster Care

	Date Enacted	Core Provisions	Website Source
Legislation			
Child Abuse Prevention and Treatment Act	1974	Provides states with flexible funds to improve their children protective service systems.	http://www.acf.dhhs.gov/programs/cb/programs/capta.htm
Adoption and Safe Families Act	1997	Improves safety of children, promotes adoption and other permanent homes for children who need them, and supports families.	http://www.cwla.org/advocacy/asfapl105-89summary.htm
Programs			
Individuals with Disabilities Education Act	1997	Assist states in providing a free appropriate public education in the least restrictive environment for children with disabilities ages 3 through 21 years and early intervention services for infants and toddlers through age 2 years and their families.	http://www.ed.gov/about/offices/list/osers/policy.html
Medicaid	1965	Pays for medical assistance for certain individuals and families with low incomes and resources.	http://www.cms.hhs.gov/medicaid/
Early and Periodic Screening, Diagnostic, and Treatment	1989	Medicaid's comprehensive and preventive child health program for individuals younger than 21 years.	http://www.cms.hhs.gov/medicaid/epsdt/default.asp
Title IV-E, Social Security Act (Foster Care and Adoption Program)	1980	Helps states provide proper care for eligible children who need placement outside their homes and assists in finding adoptive homes for eligible children with special needs.	http://www.acf.dhhs.gov/programs/cb/programs/4efc.htm http://www.acf.dhhs.gov/programs/cb/programs/4eaa.htm
Title IV-B, Subpart 1(Child Welfare Services Program)	1967	Strives toward keeping families together, including preventive intervention, placement, and permanent homes through foster care or adoption, and reunification services.	http://www.acf.dhhs.gov/programs/cb/programs/4bcwsp1.htm
Title IV-B, Subpart 2 (Promoting Safe and Stable Families)	1997	Prevents the unnecessary separation of children from their families, improves the quality of care and services to children and their families, and ensures permanency for children by reuniting them with their parents.	http://www.acf.dhhs.gov/programs/cb/programs/fpfs.htm
Title XX (Social Services Block Grant)	1981	Provides social services directed toward achieving economic self-support, prevents neglect, abuse, and the exploitation of children and adults, prevents or reduces inappropriate institutionalization, and secures referral for institutional care.	http://www.acf.hhs.gov/programs/ocs/ssbg/
Title V	1935	Authorized the creation of the Maternal and Child Health Services programs, providing a foundation and structure for ensuring the health of mothers and children for more than 60 years.	https://performance.hrsa.gov/mchb/mchreports/tvisreports.asp

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Table 2

Barriers and Proposed Solutions to the Identification of Developmental and Behavioral Problems in Young Children Entering Foster Care

Barrier		
Broad Issue	**Specific Issue**	**Proposed Solution**
Poor identification of children with need	Comprehensive assessments on entry into foster care do not occur	Develop partnerships across child welfare, health care, and education to implement formalized screening/assessment. Where geographically appropriate, consider establishment of multidisciplinary assessment center
	Standardized assessment tools are not used	Research available tools and determine which are most useful for this population
	Developmental and mental health concerns are less of a concern than physical health and safety	Develop mechanisms for inclusion of developmental and mental health concerns (examples: specified field in data entry system or health passport; mandatory inclusion of developmental and behavioral issues at court hearings and case reviews)
Difficulties ensuring children access to services	Overwhelming caseloads and placement changes lead to poor case management	Develop innovative mechanisms for case management using public health nurses, lay home visitors, social workers, or trained case managers
	Consent and confidentiality concerns impede sharing of clinical information	Develop joint memorandums of understanding across public agencies
	Lack of clarity regarding responsible party leads to inconsistent monitoring of potential concerns	Identify a clear case manager
Lack of information regarding effectiveness of available services	Lack of funding for collaboration and service provisions	Advocate for increased funding for services for children in foster care; pursue Medicaid coverage for all children entering foster care
	Intervention services may not be effective with this population, either due to procedural issues(services not provided at sufficient intensity) or lack of efficacy	Engage in outcome-based research to examine whether available and/or experimental interventions improve the health, developmental, and mental health status of children in foster care
Limited use of foster parents as therapeutic agents	Foster parents are not equipped to manage children with developmental and/or behavioral needs	Train specialized foster parents who can offer therapeutic foster care for children who are medically fragile, developmentally disabled, or emotionally disturbed; reimburse based on care provided and foster parent skill/training

Table 3

Checklist for the Healthy Development of Foster Children

1	Has the child received a comprehensive health assessment since entering foster care?
2	Are the child's immunizations up to date and complete for his or her age?
3	Has the child received hearing and vision screening?
4	Has the child received screening for lead exposure?
5	Has the child received regular dental services?
6	Has the child received screening for communicable diseases?
7	Has the child received a developmental screening by a provider with experience in child development?
8	Has the child received mental health screening?
9	Is the child enrolled in an early childhood program?
10	Has the adolescent child received information about healthy development?

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Table 4

Framework for a Comprehensive Approach to Addressing the Health, Developmental and Mental Health Needs of Children in Foster Care: Critical Components*

1	Initial screening and comprehensive health assessment
2	Access to health care services and treatment
3	Management of health care data and information
4	Coordination of care
5	Collaboration among systems
6	Family participation
7	Attention to cultural issues
8	Monitoring and evaluation
9	Training and education
10	Funding strategies
11	Designing managed care to fit the needs of children in the child-welfare system

* The information in this table has been modified from the report *Meeting the Health Care Needs of Children in the Foster Care System: Summary of State and Community Efforts Key Findings* (page 23).[78] A copy of the full report is available on the web at http://gucchd.georgetown.edu.