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Incorporating Multifaceted Mental Health Prevention Services in Community Sectors-of-Care

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Abstract This article proposes a framework for embedding prevention services into community sectors-of-care. Community sectors-of-care include both formal and grassroot organizations distributed throughout a community that provide various resources and services to at-risk children and their families. Though the child population served by these organizations is often at elevated risk for mental health problems by virtue of children's exposure to difficult life circumstances (poverty, maltreatment, homelessness, domestic violence, etc.) these children face many barriers to accessing evidence-based prevention or treatment services. We review evidence and propose a framework for integrating prevention services into community sectors-of-care that serve high-risk children and families.

Keywords Prevention · Children · Mental health · Community sectors-of-care · Social service agencies

Introduction

Mental health problems along with school failure, delinquency, and health-compromising risk behaviors are at high levels among children and youth in the U.S. Each year 20% of children and youth experience mental health problems, and 75% of these children fail to receive appropriate mental health services (U.S. Department of Health and Human Services 1999). Moreover, many children who do not show clinical symptoms but are at elevated risk for mental health problems, go unidentified and underserved (Knitzer 2000). These are children who encounter adversity in their lives arising from contextual risk factors, such as poverty, homelessness, domestic and community violence, maltreatment, exposure to parental mental illness and substance abuse, natural disasters, terrorism, and the emotional trauma of separation from families (Huang et al. 2005).

Despite limited availability and accessibility of mental health services from formal provider systems, many children who experience the stressors described above are served by non-profit community organizations including shelters, faith centers, community centers, social-service agencies, and foster or respite care settings. Originally, non-profits were efforts by people to dispense remedial services for poor and marginalized families and individuals in crisis (DiMaggio and Anheier 1990). While there will always be a need for remedial services for family and individual crises, many public health problems can be dealt with and even prevented through community organizations committed to helping people develop and/or harness individual and family assets and strengths. In this article, we model a new type of "community sector" organization, one that focuses less on crisis and more on mental health promotion and positive youth development (Wagner 2006). Below, we review briefly the rationale for a comprehensive approach to children's mental health that incorporates prevention as a key component. Focusing on the utility of a selective-prevention framework, we provide a heuristic model for the integration of evidence-based preventive interventions into community "sectors-of-care," anchored

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by community-based organizations providing social services to at-risk children and families. The model is reflective of our ongoing program of services research that addresses the integration of evidence-based prevention within real-world service systems. The Early Risers "Skills for Success" program (e.g., August et al. 2007) is described as an example of evidence-based prevention adapted for a selective, homeless population, embedded into a broader community sector-of-care, family supportive housing. This article and the research program described therein are the first to highlight the utility of the selective prevention framework in the context of this community sector-of-care.

A Comprehensive Approach to Children's Mental Health

With increasing awareness of children's unmet mental health needs, recent reports have called for a comprehensive primary mental health system which emphasizes integrating mental health care within systems central to child development (e.g., President's New Freedom Commission on Mental Health 2003; Tolan and Dodge 2005). This comprehensive approach would provide a seamless array of services, ranging from evidence-based treatments for those with formal diagnoses to early intervention and prevention practices for those at-risk, to education and support for parents and others who have concerns about children's mental health status.

Systems-of-care approaches have attempted to address the inadequacy, fragmentation, and inaccessibility of children's mental health services through efforts to integrate services across the multiple care systems serving children (Stroul and Friedman 1996; VanDenBerg and Grealish 1996). These systems include both primary care settings, such as pediatric clinics, schools, and day care centers and tertiary settings such as child welfare, juvenile justice, and substance abuse agencies (e.g., Farmer et al. 2003; Hoagwood and Koretz 1996). Empirical evidence regarding systems-of-care approaches has revealed that while changing systems can indeed decrease fragmentation and increase access to mental health care for children, systems change alone does not improve child and family functioning (Bickman et al. 1999). Instead, attention must simultaneously be paid not only to the systems serving children (in order that children's access to care improves), but also to the quality of care provided within those systems. Moreover, systems-of-care approaches have typically focused on children with severe mental health needs, i.e., those meeting diagnostic criteria for a psychiatric illness, rather than those at high risk (e.g., Stroul and Friedman 1986).

Inclusion of Early Intervention and Prevention in the Continuum of Care

Prevention is an important component of a comprehensive approach to children's mental health but one that has yet to be fully developed (Hoagwood and Koretz 1996; Tolan and Dodge 2005). Prevention approaches delivered in the form of media messages, education, skills training, mentoring, and support could have significant impact in reducing risk and promoting protective processes. Evidence-based prevention programs have documented gains in behavioral, social, and academic outcomes that are linked to reductions in mental disorders and risky behaviors (Greenberg et al. 2001). However, prevention services that could mitigate adverse outcomes often do not reach their intended targets: the integration of prevention programs within community practice has been slow and tedious. The gap in science to service is the result of two barriers: (i) insufficient attention to building a rationale and infrastructure in sectors serving children who could most benefit from prevention, and (ii) a lack of methodology to guide service providers in how to incorporate, deliver, and resource preventive interventions in a form that is usable, useful and sustainable. The research described in this article addresses some of these barriers, presenting an example of how prevention services might be embedded into the continuum of care for at-risk children in a community sector-of-care. We begin by defining prevention and current limitations, and by describing community sectors-of-care as potential prevention portals.

Prevention Framework

Prevention interventions are defined as strategic actions that are implemented prior to the onset of a diagnosable disorder (Mrazek and Haggerty 1994). As such, they aim to counteract risk factors and promote protective factors in order to disrupt the developmental processes that contribute to human dysfunction (Coie et al. 1993). In 1994 the Institute of Medicine (IOM) issued a report that recommended that prevention itself be divided into three subcategories on the basis of the intervention's target population. Universal prevention interventions, typically directed at community-wide causal risk factors, are targeted to a whole population group that has not been identified on the basis of risk. Indicated preventive interventions target individuals who have minimal but detectable symptoms foreshadowing a mental disorder but who do not meet diagnostic criteria for a disorder or health-compromising behavior. Last, selective preventive interventions focus on population subgroups whose risk of developing a mental disorder is significantly higher than

average as evidenced by exposure to harmful life experiences or adverse conditions (e.g., violence, homelessness, etc.). The risk may be imminent or may be a lifetime risk (Munoz et al. 1996).

In contrast to universal and indicated approaches, which constitute the vast majority of evidence-based prevention programs, the potential of selective preventive interventions has yet to be realized. Since selective prevention efforts target subpopulations of children at elevated risk on specific indicator(s), their use is tied to the contexts or sectors serving such children. Therefore, one reason that the potential of selective prevention interventions may not yet be realized is that the systems or sectors serving these children may not have the access, interest or capacity to implement them.

Selective Prevention and Service Portals

One way to approach the 'fit' of prevention program types to their most appropriate portal is to consider service systems or sectors in the context of the populations they serve. For example, schools and primary healthcare might be considered universal or primary sectors, targeting all children,[1] while juvenile justice might be considered an indicated or tertiary sector, serving only those children whose behavior has resulted in their system involvement. Selective or secondary sectors might include those subpopulations of children who enter a sector due to life circumstances, but unrelated to their mental health needs; for example child welfare/protection.[2]

Focusing on child-serving systems or sectors is important, because there is evidence that the likelihood of receiving certain prevention or treatment services might differ according to the system(s) in which a child participates (Garland et al. 2001). For example, child welfare system services often lead to mental health or substance abuse services as the latter are common elements of reunification plans (Garland and Bessinger 1997). The converse, however, may also be true: families who do not receive services within a formal/governmental system, particularly one of the selective or indicated systems, may have less access to children's mental health services, regardless of level of need. Further research is needed to understand the relationship between system involvement and mental health prevention or treatment services access and engagement.

There is a dearth of research assessing levels of mental health difficulties in different sectors, but data indicate (not surprisingly) that mental health disorder prevalence rates are significantly higher in selective/secondary and indicated/tertiary sectors than in universal sectors. For example, while population prevalence rates indicate that approximately 20% community youth meet criteria for a psychiatric diagnosis (Shaffer et al. 1996) estimates of diagnosed disorders among children within the selective and indicated sectors are much higher: in the child welfare system, for example, between 29% and 80% children meet criteria (Landsverk and Garland 1999; Pilowsky 1995).

Although they may be scattered throughout a school, children who qualify for selective prevention services may be clustered in diverse secondary or selective service sectors. Organizations in these sectors provide services to subpopulations of children who are at elevated risk for mental health problems by virtue of stressful life circumstances. These circumstances include, but are not limited to: divorce (dependency courts), poverty (welfare, housing, or shelter services), domestic violence (agencies and shelters), and maltreatment or separation from primary caregivers (foster care and adoption agencies). While faith and community centers and social-service agencies do not only provide services to a high-risk population, those serving families in vulnerable circumstances (e.g., high-crime neighborhoods) may serve a significant proportion of children eligible for selective prevention.

Selective sector services may be provided by governmental or formal entities (e.g., child welfare system, dependency courts). However, with increasing frequency selective sector services are provided by community-based or 'grassroots' service providers: social service agencies, domestic violence shelters, foster and adoption agencies, and community or faith centers in high-risk communities (Ryan 1999). Very little attention has been paid to the mental health status or access to care of children served by these community-based sectors (e.g., Gewirtz et al. 2008; Shaw et al. 2006), in contrast to the extant systems-of-care literature on mental health status and access in formal or governmental sectors. Just as selective prevention may be an underutilized and under-researched prevention mode, selective or secondary service sectors seem to be underutilized prevention portals.

In addition to those services they provide by dint of their mission, these child-serving organizations are ideally positioned to function as vital brokers to a broad range of health and human services for selective prevention care (Farmer et al. 2001). Moreover, prevention is a goal that

[1] Even universal sectors may not actually serve all children, missing particularly those at high-risk, such as students dropping out of high school, or children without a primary healthcare provider due to lack of insurance, high mobility, or related factors.

[2] We do not want to confuse sector mission with the range of services provided within a sector: while sectors are most likely to provide services consistent with their mission—such as universal prevention provided in schools and primary care—they may provide a range of prevention or treatment services, such as special education or school-based mental health clinics.

many agencies embody within their missions. This vision—of community organizations as portals to the continuum of prevention services and mental health care—serves as a catalyst for a paradigm shift in the provision of care, centered on the concept of individually tailored, easily accessible, family-centered, coordinated, and culturally relevant services (Farmer et al. 2003).

Community Sectors-of-Care

We define community sectors-of-care as community-based organizations located among target populations, providing potential portals to mental health prevention, positive youth development, or treatment services for children. The term 'community sectors-of-care' refers to the notion that although they may not formally belong to a 'system', such organizations are often interdependent, either formally (e.g., all domestic violence shelters are licensed by a state agency) or on an informal basis (e.g., through community coalitions or funding agencies such as the United Way, through exchanges of service referrals, service coordination with client families). Organizations include both grassroots services (e.g., shelters) and professional agencies, such as social service agencies (Couto 1990). Their funding is often fluid, tied to local and state government contracts, grants, foundation and philanthropic support. Organizational infrastructure may be highly variable, and, particularly in small agencies with little infrastructure, staff turnover may be high, salaries relatively low, and staff may be 'generalists', serving consumers in several different capacities. Staff knowledge of child development and children's mental health varies widely, but may be quite limited, particularly in grassroots services [see, for example, Gewirtz and Menakem (2004) regarding domestic violence shelters]. However, because they are non-governmental, and closely tied to target communities (e.g., by employing staff or leadership from within the community), these organizations may engender community trust and maintain strong connections over time with the individuals they serve. Hence, engaging in mental health services through these entities may be seen as less stigmatizing than receiving formal system services (e.g., at a mental health clinic). Thus, while their infrastructure, staff expertise, and fluidity may present significant challenges, these agencies could potentially be critical portals for families, with the potential to truly engage families in providing and brokering children's prevention and mental health services (e.g., Shaw et al. 2006).

As awareness of the mental health needs of children increases, community-based organizations are realizing their potential as service providers in meeting the mental health needs of their children and youth. However, the scope of their role remains unclear. For example, what types of services should be provided by community sectors-of-care? Should their target population include children in all families served, or a subset? Should prevention or mental health treatment services be provided on-site, or in coordination with other organizations? Should services be provided by agency staff, or by outside professionals, or a combination? What funding streams can be accessed to pay for these services? Challenges are significant: community organizations (particularly grassroots services) often lack access to children's mental health resources in general and evidence-based services in particular (Shonkoff and Phillips 2000). For example, in a study of 18 supportive housing agencies in a major metropolitan area, staff in only two agencies had any experience with evidence-based psychosocial interventions for children and families (Gewirtz et al. 2008).

Below, we describe an effectiveness study that is currently underway to integrate an evidence-based prevention program into a community sector-of-care: family supportive housing. Family supportive housing agencies provide subsidized housing with case management supports for homeless families, many of whose caregivers suffer from mental illness or chemical dependence. These organizations are not-for-profit social service agencies located within and serving host communities, providing single or scattered site housing for periods lasting from 18 months to indefinite. This community sector of care provides an ideal setting in which to embed evidence-based prevention services into an existing service structure. Children who live in supportive housing are at high risk for serious mental health problems and are in need of a continuum of mental health services (Vostanis et al. 1998). Moreover, single-site supportive housing affords a rather unique opportunity to engage families in prevention programming as caregivers and children have easy access to program activities that are delivered in their housing units.

It is within this context that we describe a community-academic partnership that formed between representatives of a network of 18 supportive housing agencies and university prevention researchers to reposition mental health care in the service mission of the network and to set a course for integrating evidence-based prevention services within a developing continuum of care. Below, we briefly describe the formative stages of the collaboration and development of infrastructure to accommodate the service transformation (the collaboration is further documented in Gewirtz 2007). Next we provide an overview of the evidence-based prevention program (i.e., Early Risers "Skills for Success") that was adopted by the network. Last, we detail the adaptation of the intervention model to provide optimal fit for the supportive housing sector-of-care, and discuss some of the early lessons learned from the implementation.

Building Capacity for Prevention in the Supportive Housing Sector-of-care

Documenting the psychosocial needs of children in supportive housing and increasing awareness of providers about children's mental health and prevention were the twin goals of this preliminary stage of the partnership. An informal survey of case managers and parents initiated by the providers themselves indicated high rates of concerns about children's adjustment. Survey data of 454 children revealed concerns about the emotional or behavioral adjustment of 14% of birth to 4 year olds, 47% of 5–11 year olds, and 67% of teens (Gewirtz et al. 2008). During the same time period, a provider-driven survey of extant mental health and psychosocial resources available in the housing agencies revealed a lack of services for screening, assessment, prevention, treatment, and/or systematic approaches to referring individuals with identified problems to appropriate care systems in the community (Gewirtz et al. 2008). The next step was to formulate an action plan to develop a practice infrastructure that would provide both a service program within the organization as well as a protocol for referrals. This plan included adoption of an evidence-based early preventive intervention (the Early Risers Program) to be offered to resident families, hiring of a new type of staff person (i.e., prevention specialists, also known as family advocates), and adaptation of the prevention model to the supportive housing context and population.

The Early Risers Multifaceted Prevention Framework: Prototype

Early Risers is a multifaceted, early age-targeted preventive intervention designed to meet the early, multiple and changing needs of children at risk for serious conduct problems including the use and misuse of illicit substances. The intervention model conforms to a developmental-ecological perspective (Tolan et al. 1995) which acknowledges the effects that individual, family, peer, school, and community risk factors have on normal developmental tasks of childhood as well as the cumulative impact of these risks over time. The prototype is an indicated model designed for elementary school delivery. It uses a grade-wide screening tool to identify and enroll children with non-normative levels of disruptive and aggressive behaviors (August et al. 2001). The intervention design includes two complementary components, *Child* and *Family*, which are delivered in tandem over a 2- to 3-year period by a community prevention specialist (heretofore referred to as the Early Risers' family advocate). The *Child* component features social-emotional skills training, reading enrichment, and creative activities organized around sports, nature, music, and artistic expression delivered within the structured settings of Summer School/Camp and Regular School Year ("circle of friends groups") programs. All program activities are buttressed by a behavioral management support system that provides a highly structured environment in which children's behavior is observed and reinforced on a moment-to-moment basis. *Child* also includes a Monitoring and Mentoring School Support program in which the family advocate systematically assesses the child's attendance, behavior, and academic performance in school on a regular basis and consults with the teacher in the provision of individually-tailored interventions, including behavioral plans, academic tutoring, social support, and home–school collaboration. The *Family* component consists of three coordinated interventions. First, Early Risers' Family Nights are offered five or six times during the year. Each event includes a 15-min communal experience with snacks, a 60-min parent education forum focused on topics of general interest to parents (e.g., media influences, bullying), and a 15-min parent–child interactive activity. Second, Parenting Education, and Skills Training Groups are offered each year. Content focuses on training parents to guide and reinforce developmentally appropriate child social-emotional skills, provide consistent and contingent consequences, and manage stress to improve family interactions. Third, a Family Support service is available to caregivers. This is typically a home-based intervention that is aimed at (1) building alliances with caregivers, (2) assisting families to set goals and develop action plans to improve family life, (3) providing brief interventions to resolve crises (e.g., eviction, unemployment, etc.), and (4) connecting families with specialized services in the community as dictated by the presence of significant health or mental health problems.

Evidence Base

The Early Risers program has evolved over a period of 10 years, informed by results from controlled efficacy and effectiveness trials. These trials have examined early child and parent outcomes, dosage effects, dismantling of components, program fidelity, consumer satisfaction, and barriers to utilization (for a review see August et al. 2007). Efficacy research demonstrated that children receiving Early Risers, compared to no-intervention control children, made significant gains on (a) proximal intervention targets (e.g., behavior adjustment, social competence, academic achievement, and parenting practices), (b) intermediate intervention targets based on peer assessments of leadership and social etiquette and child selection of less

aggressive friends, and (c) distal intervention targets as reflected in lower rates of oppositional and defiant problem behaviors by the middle school years.

Following validation, the Early Risers Program was adopted by a community service agency (Pillsbury United Communities) that served an urban, culturally diverse population. This afforded an opportunity to evaluate whether program effects could be replicated when programming was delivered by community practitioners under real-world options for implementation. An early-stage effectiveness trial was conducted during which program support services, technical assistance, supervision, and funding to assist the agency with program implementation were provided by the developers. Under these conditions, the program produced positive gains similar to those achieved in the efficacy study (August et al. 2003). A subsequent advanced-stage effectiveness trial sought to determine whether the same agency could sustain practice infrastructure and reproduce program effects with a new cohort of participants, allowing supervision, implementation, and funding to vary on the basis of routine conditions. Compared to results obtained in the early-stage effectiveness trial, program attendance rates were lower and only one positive outcome was replicated (August et al. 2006). Organizational barriers that impeded program sustainability included unreliable transportation, poor collaboration between the agency and local schools, high staff turnover, and agency downsizing.

Early Risers Prevention Service: Community Integration Model

In the context of increasing interest by community sectors-of-care in preventive children's mental health services, and the earlier discussion regarding the opportunities provided for prevention by selective/secondary sectors, the Early Risers community integration model was designed. This model adaptation incorporates many of the guiding principles and strategies of the Ecological Family Intervention and Therapy Model (EcoFIT; Dishion and Stormshak 2006). In keeping with this perspective, the intervention is tailored to fit the child and caregiver's mental health needs as determined by an empirically based needs assessment. A key feature is attention to caregiver motivational dynamics at all intervention phases to promote engagement and investment.

The Early Risers' community integration model differs from the prototype in several key ways. First, whereas the prototype conforms to an indicated prevention approach and qualifies children on the basis of sub-clinical levels of aggressive and disruptive behavior, the community integration model uses a selective approach making it compatible with the service mandate of community sector-of-care agencies (see August et al. 2003). As such, children are eligible for program services based on their family's residence in supportive housing regardless of their status on mental health risk indicators. Second, in contrast to the prototype's population-based screening and enrollment en masse, children in the community integration model are enrolled as they enter the system and services are provided on an ongoing basis rather than delaying service until a critical number of clients are recruited. Third, to adequately serve a more heterogeneous client base a flexible framework of intervention options was designed with multiple levels of care to offer clients only the services they truly need. This flexible framework included the following phases: (a) a comprehensive assessment system at intake in which child- and family-specific risks, problems, and strengths data are collected and used to assign individual children and their caregiver(s) to levels of care dictated by their assessment profile; (b) a 2-year intensive intervention phase with three levels of care: level 1, basic prevention service, level 2, tailored prevention service, and level 3, specialized treatment services; and (c) a health maintenance phase in which periodic assessments are applied to monitor risk status and to reinstitute intervention services as needed.

The comprehensive assessment system aims not only to collect information but also to orient and engage family members, particularly caregivers, to the intervention. Using a motivational interviewing approach based on the Family Check Up (Dishion et al. 2003) family advocates meet and engage caregivers over 3 sessions, during which motivational enhancement strategies are used to elicit caregiver goals for Early Risers participation. The first 'getting to know you' session provides an opportunity for the caregiver to talk about the family and ask about the intervention. In the next session, the advocate gathers information from caregivers, and children. The third session (scheduled when mailed teacher information has been received and all tools scored) comprises a feedback and goal setting session.

The assessment system comprises three tools (Realmuto et al. 2000). Caregivers provide information about themselves via the Parent Assessment and Risk Tool (PART), and about their child via the Child Assessment and Risk Tool (ChART). The child's teacher provides information with the Teacher Assessment and Risk Tool (TART). Responses from these instruments are tabulated on a scoring summary sheet that yields a specific level of care/set of prevention activities. The PART is an 81-item yes/no format structured interview that covers 14 key functional areas. These include health, social and personal relationships, community engagement, personal skills, employment, finances, housing, utilization of resources, disorders of attention, impulse

control and chemicals, disorders of mood and emotion, mental health treatment utilization, family strengths, and parent-management skills. Within each domain questions cover resources, skills, stress, and risks. The ChART covers nine areas of child functioning in 69 questions. The domains of interest include academic and communication skills, social relationships and friendships, community activities, medical and mental health, attentional abilities, behavioral disturbances, anxiety, depression, and obsessive/compulsive problems. The PART and ChART can be administered in a 90–120 min interview with the family. Finally, the teacher-completed TART includes 16 questions about fundamental academic skills, use of special educational resources, school absences, friendships, attention and impulse control problems, and general disruptiveness. The final step in the assessment system is a parent meeting in which the family advocate reviews, summarizes and highlights the strengths, risks, and needs, the menu of prevention services options, encouraging a discussion about the family's goals and objectives. Repeated screenings are necessary as risk status itself is unstable over development (Kraemer et al. 1997); in the Early Risers program, bi-yearly screenings ensure that children are placed in the levels most appropriate to their need.

Tailoring Services: Addressing Variable Levels of Need

In the Early Risers example above, the prevention system provides its own universal, targeted and treatment levels. Thus, all children included in the selected population (in this case, formerly homeless families in supportive housing) receive a basic (universal) level service. At this level (level 1) it is assumed that every child can benefit from programming that promotes increased social–emotional competence, academic achievement, and creative expression with a focus on enhanced self-esteem. A comprehensive risks, problems, and strengths assessment results in access to targeted prevention (level 2) and treatment (level 3) care. Children at level 2 receive basic services (level 1) plus individualized programming that is tailored to their unique profiles of risks and strengths (level 2). The latter level includes monitoring and mentoring services at school for the child, parenting education and skills training, and family support services. At level 3, children and parents receive all level 1 and level 2 services and are also referred for specialized health services to professionals in the community.

This approach is consistent with the recommendations of Offord et al. (1998) who argue for a multi-stage screening and intervention approach to cost-effectively distinguish children who need further prevention (and treatment) efforts from those requiring a universal prevention approach. Some prevention program developers have developed unified prevention frameworks, offering a universal program to a large group and indicated services to those failing to benefit from the universal program (e.g., Dumas et al. 1999; Conduct Problems Prevention Research Group 1999; Sanders et al. 2002; Sanders et al. 2007). However, there is little evidence that across programs or in real world settings, children receive care in hierarchical ways (i.e., referrals from universal to selected or indicated prevention, or prevention to treatment).

One of the key elements of the Early Risers service system is the smooth transition from prevention (levels 1 and 2) to treatment (level 3). In this study, the development of an infrastructure to support this transition is an ongoing process, as treatment is facilitated but not provided by program staff. Involving the mental health system in facilitating referral mechanisms and ongoing working relationships is necessary for ensuring that children have access to treatment. There is a dearth of literature on integrated prevention-treatment systems, but engagement in a prevention program may serve as a psychological bridge to participation in treatment services.

Early Lessons Learned

Although the study is still in its implementation phase, feedback from housing providers with regard to the Community Integration Model is very encouraging. Over 90% of eligible children were recruited for Early Risers programming, and program participation and engagement are at levels similar to those in prior Early Risers efficacy and successful effectiveness trials. A strong working relationship between the researchers and community implementers has been a key factor in initial success. A single intermediary entity representing 16 participating supportive housing agencies managed the project subcontract, providing the agencies with the economies of scale not usually afforded them. The 16 independent, non-profit agencies participating in this study represent 90% of the single site family supportive housing in a large metropolitan area, and as such, show wide heterogeneity in resources, funding, staffing, and capital, consistent with the earlier discussion of community sectors-of-care. As the Early Risers advocates and activities became valued within the housing sites, the partnership, through the intermediary agency, began developing a sustainability plan for the post-study period.

Several challenges also emerged along the way associated with the tension between research and practice. Randomization was a significant source of tension early on: while the 16 agencies had all agreed to randomization to Early Risers or services-as-usual groups, once the program

started and was perceived by the participating agencies as helpful, the services-as-usual agencies articulated their frustration at having to wait for the randomized trial to end in order to access program services. Continuing to educate agencies about the need for a randomized trial to ascertain what, if any, gains, the program provided, was necessary. The intermediary agency also worked closely with the researchers to define roles clearly from the start. The prevention researchers did not maintain oversight of the practice elements of the Early Risers community integration program, but ongoing, voluntary technical assistance has been provided. Fidelity checks are presented as opportunities for feedback and technical assistance by the program manager on the research team. At the start of the third year of the study, the agencies report that their Early Risers participation has increased their capacity to understand and respond to the psychosocial needs of children and families in supportive housing.

A latent (and emerging) goal of the Early Risers community integration model is the development of a fully integrated system-of-care model within community sectors-of-care. In this model, community sectors-of-care are linked as portals to a comprehensive continuum of children's mental health care that includes the 'conventional' sectors such as clinics and schools. Thus, while in this example community sectors access prevention through their participation in Early Risers, they also are accessing a continuum of care for their client families through larger, or more formal care systems, and through links from Early Risers to those systems. Understanding the mental health utilization patterns of children across different sectors or systems is a clear need for the field, with a little extant research, although dynamic longitudinal modeling provides a methodological forum for investigating these questions (Garland et al. 2001). Such questions would address not only the timing of prevention/treatment interventions, but also the preferred locus and content of such interventions.

Discussion

Hoagwood and colleagues (2001) have noted that "acceleration of the pace at which evidence-based practices can be more readily disseminated will require new models of development of clinical services that consider the practice setting in which the service is ultimately to be delivered." Given the significant risks to adjustment experienced by children in many selective sectors, there is little doubt of the need for more studies of prevention service implementation in community settings. Studies with at-risk urban children are especially critical, as these families are less likely to participate in and remain in mental health services (Kazdin 1993; Tuma 1989).

In the example we have provided, the adoption, adaptation, and implementation of an evidence-based prevention program within the supportive housing network was predicated on the initial recognition and identification of children's needs for mental health care by stakeholders working within that community care sector. Thus, members of the community initiated the efforts to integrate prevention into the community sector-of-care, and the ongoing project is a true partnership between the researchers/prevention developers and the community sector-of-care. This partnership provided the impetus for successful 'translation' of the program into the language, meanings, and practices of relevant stakeholders. In part, this was achieved by changing organizational practice in terms of (a) requiring systematic screening of risks, problems, and strengths for all child residents, (b) hiring staff (family advocates) to provide mental health education and support services for children and their caregivers, (c) providing training and technical assistance for family advocates, and (d) monitoring fidelity of program implementation and quality assurance for all program components. There is a growing body of research that shows that successful partnerships that engage stakeholders from the beginning lead to what is termed "capacity-building" (Southam-Gerow 1990). When sectors-of-care have sufficient capacity they are better able to produce enhanced benefits in clients and sustain the program in the future.

The unidirectional focus of technology transfer (improving the transfer of knowledge from researchers to communities; Backer et al. 1995)—the most commonly utilized methodology in prevention science—has been criticized as possessing the characteristics of a 'trickle-down' approach (Wandersman and Florin 2003). A few attempts to incorporate 'bottom-up' or community-participatory methodology into technology transfer efforts have been documented (e.g., Southam-Gerow 1990). In the example described above, the prevention system itself was adapted in order to meet the needs of the selective community sector-of-care in which it was embedded (e.g., by enrolling participants as they enter the system). Further, the prevention components were tailored to meet the needs of individual families with varying levels of need: i.e., basic, indicated, and treatment levels. In the community integration model described above, we have described adaptations to the original prevention program at both the individual (i.e., child and family) and organization/sector (i.e., housing agency) level.

Prevention research has been enhanced by the development of newer conceptual models that incorporate concepts from fields such as marketing (Sandler et al. 2005) and engineering (Collins et al. 2004). The importance of these models lies, in part, in their ability to bridge the science-practice divide by generating knowledge

regarding the adaptation of interventions to both service contexts (i.e., *adapted* interventions) and to the characteristics of end consumers (i.e., *adaptive* interventions). Further research is needed in model development, as well as in investigating and elaborating key details associated with the integration of effective prevention in community sectors of care—for example, individual families' preferences for prevention delivery modality.

One of the key concerns for community sectors-of-care is the lack of internal capacity and infrastructure with which to integrate evidence-based practice into extant services. Partnerships with membership organizations, or networks of agencies in community sectors-of-care, create service economies of scale for small community or grassroots entities. In the example above, the partnership was established between a membership organization representing the community sector-of-care (i.e., a network of 90% of the single site supportive housing agencies in a large metropolitan area) and the prevention researchers. Prevention specialists (i.e., family advocates) were shared between agencies in the network, thus increasing the sustainability of the prevention infrastructure. In similar ways, others have reported successful efforts at prevention implementation via collaborations between state coalitions for domestic violence and intervention developers (McAlister Groves, personal communication). As implementation and dissemination science develops, far more knowledge is needed regarding the details of sector or organizational implementation (Elliott et al. 2003). For example, what are the necessary community sector capacity prerequisites for technology transfer of prevention in children's mental health? What are effective methods for partnership development in the course of capacity building in order to ensure effective technology transfer? (Crisp et al. 2000; Jensen et al. 1999). Particularly in small, grassroots agencies with turnover and infrastructure challenges, some capacity-building is essential to lay the groundwork for the implementation of evidence-based practices. In particular, ongoing technical assistance from program developers is necessary to maintain and support practices.

Finally, further knowledge is needed regarding the appropriate methodologies for implementation efforts. For example, community-based participatory methods are congruent with the values, culture and missions of many community-based agencies. Conversely, a more conventional technology transfer approach may be more effective with more formal, hierarchical systems that have well-established, more rigid policies and procedures and more human resource infrastructure. Wandersman & Florin suggest that "…a major gap exists between science and practice…. The gap indicates that prevention science has insufficiently affected the capacities that communities need to plan and implement effective prevention programs" (2003, p. 445). Addressing these capacities and related questions will be crucial to the future success of implementation efforts in community sectors-of-care.

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