

Implementing Integrated Care in Pediatric Mental Health: Principles, Current Models, and Future Directions

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Traditional models of health care delivery are inadequate for addressing all the needs of the child and adolescent population that has mental illness. The integrated care model seeks to partner pediatric mental health specialists with primary providers to better meet these needs. The authors outline the core principles guiding integrated care for youths and describe key characteristics of the team members involved. Three models of integrated care have emerged and have proven effective. Several representative programs are described, and the advantages and disadvantages of each are reviewed. The review concludes by identifying the challenges that have prevented wider dissemination of the integrated care model and by exploring potential future directions for the field.

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One in five children under the age of 18 is diagnosed as having a psychiatric illness in the United States, but only approximately one quarter of those affected receive services (1, 2). By age 14, about 50% of emotional and behavioral problems have emerged, and by the mid-20s, this prevalence rises to 75% (1, 3). Despite the development of effective treatments, traditional models of care (which rely on children and their families' gaining access to a limited pool of specialty mental health services) are failing to meet the psychiatric needs of our young people, and this failing in turn increases the overall burden of mental illness across the lifespan (2). To deliver effective treatments to young people and their families, we need novel models of care to overcome the significant barrier of limited specialist resources.

One such model, the integrated care model, seeks to address limitations by creating partnerships between primary care providers (PCPs) and mental health specialists to deliver a first tier of mental health services in primary care settings (2, 3). With the ability to provide early screening, identification, intervention, and ongoing follow-up, primary care serves as an ideal and convenient setting for addressing common emotional and behavioral problems of children within a developmental context (4). In reality, patients and families frequently seek out psychiatric care in primary care settings. Studies show that 75% of children under age 18 present to primary care for psychiatric care needs, and 50% of primary care visits are related to psychosocial, emotional, and behavioral concerns (3).

However, PCPs tasked with treating mental health disorders face many challenges, such as limited residency

training in psychiatric disorders, time constraints, and poor reimbursement. Furthermore, although many PCPs may have confidence treating milder emotional and behavioral disturbances, they are less likely to be comfortable diagnosing and treating more complex mental illnesses, which often require multicomponent treatment interventions, involve polypharmacy, or both (4). Integrated care models seek to address these challenges and limitations through the integration of child and adolescent mental health specialists into primary care practices to provide the necessary knowledge, skills, and support to effectively support PCPs caring for youths with mental health disorders.

The concept of integrating services to provide comprehensive medical care under one roof is not new to primary care. Since the 1960s the American Academy of Pediatrics and other allied fields of primary care have steadily advanced the concept of the "medical home" as a centralized location to provide accessible, continuous, comprehensive, coordinated, patient-centered, compassionate, and culturally effective care for patients and families (5). This model shifts the responsibilities of the single PCP to a dynamic primary care team in which the PCP oversees the overall care of the patient with the help of specialist teams and other care personnel (4). A number of studies analyzing the effectiveness of integrated care models for child mental health have demonstrated positive effects in terms of improved mental health outcome, decreased caregiving stress, and improvements in practice scope and skills for primary care teams (6–8). From a policy perspective, in recent years the passage of the Mental Health Parity and Addiction Equity Act, the

Affordable Care Act, and the 21st Century Cures Act have increased the interest and momentum for the integration of child mental health services within primary care (4) across the United States.

The following section highlights core tenets and workforce needs for effective implementation of integrated care delivery.

CORE PRINCIPLES OF INTEGRATED CARE

Working in child and adolescent mental health services requires coordination across multiple systems of care, using a team approach that prioritizes shared goals, mutual trust, effective communication, and clear division of responsibilities (9). To establish an effective child mental health service that is integrated within primary care, we have collated core principles from medical home, collaborative care, and child and adolescent psychiatric service models and present them below (3, 10):

Patient and Family-Centered Care

It is essential to build the care plan with the youth and his or her family, centering on working with them around their needs and concerns. Understanding the developmental context of the child and guiding the family by means of psychoeducation and counseling to provide a safe and nurturing environment are pivotal for pediatric mental health care.

Evidence-Based Practice Guidelines

Common mental disorders among youths are treated with evidence-based approaches, often implemented either via manualized approaches or by using algorithms for providers.

Measurement-Based Treatment to Target

Each patient and family has specific targets and unique clinical goals that are tracked with validated rating scales and periodic clinical assessment.

Population-Based Care

Health care teams plan for mental health prevention, screening, early identification, and treatment for populations defined by their age, risks, and prevalence or onset of disorders. Registries are built as part of medical records to track mental health outcomes and standardize treatment plans. Importantly, registries can be used to identify patients who do not respond to initial treatment approaches in order to initiate enhanced stepped-care treatment interventions, such as direct consultation with a child and adolescent psychiatrist.

Accountable Care

Recognition and reimbursement of quality outcomes for the patient, provider, and the clinical services rendered are important to ensure accountable care. Population-based registries help monitor individual and population health outcomes and deliver accountable care within the team.

Care Coordination

Given that children are likely engaged in multiple systems of care, coordination of care is essential for comprehensive care to be successful. Clear channels of communication, shared goals, and collective advocacy for the best interest of the child's health across all functioning domains are key to improving care and function. Care plans created by the team are often shared across systems to serve as a tangible frame of reference for connecting goals and resources for the child and family.

Consultation and Education

The child mental health specialist or psychiatrist is often functioning as a learner, educator, consultant, and leader of service and education, independently or in conjunction with primary care providers and administrative leadership.

CARE TEAM

Workforce definition often varies, contingent on the level of care, complexity, and access to treatment modalities. The key players who are involved in delivery of integrated child and adolescent services are the psychiatrist with child mental health experience, pediatric mental health specialist or therapist, and the PCP. Several important characteristics and functions of the various team members are discussed below (3, 9, 11).

Pediatric PCP

The PCP is a pediatrician, family medicine practitioner, physician assistant, or nurse practitioner (NP) who establishes the initial care structure, maintains continuity of care and the relationship with the child and family across development, and oversees the overall treatment needs and progress toward achieving the desired outcomes. In the structure of the integrated mental health care team, the PCP oversees overall medical care and maintains a relationship with the patient and family; introduces the psychiatric care team, with emphasis on addressing psychiatric problems and their impact on health and function; recognizes common psychiatric disorders and introduces treatment modalities; is comfortable with the use of first-line and second-line medication algorithms; partners and collaborates with the behavioral specialist and psychiatrist to work toward shared goals for the patient; monitors goals and progress; and manages periods of uncertainty and treatment changes during the collaborative process while being open to shifting of roles and responsibilities inherent to the integrated care model.

Pediatric Mental Health Specialist

The pediatric mental health specialist is usually a licensed clinical social worker or a psychologist with child and adolescent mental health-related therapeutic experience. In the structure of the integrated mental health care team, the pediatric mental health specialist has the experience and skills to cover a broad array of psychiatric disorders across

TABLE 1. Common Mental Disorders Along the Developmental Spectrum and Selected, Validated Screening Tools and Treatments^a

Age	Condition	Screening Tool	Treatment
Birth to 0	Perinatal postpartum depression (parent)	Edinburgh Postnatal Depression Scale, PHQ-9	CBT, IPT, and antidepressants (for parent)
0–4 years	Autism spectrum disorders	Ages and Stages Questionnaire, Modified Checklist for Autism in Toddlers, Revised	Multidisciplinary interventions
Young school age 4–11 years ≥6 years	Autism ADHD and oppositional traits	Childhood Autism Spectrum Test Vanderbilt's Rating Scale (6–12 years) Conner's Rating Scale Pediatric Symptom Checklist	Multidisciplinary interventions Parent management and ADHD medications
≥4 years	General screen	SCARED	CBT and antidepressants
Preadolescence, adolescence ≥8 years	Anxiety Depression	PHQ-9, modified for adolescents; Short Mood and Feelings Questionnaire CRAFFT	CBT/IPT and antidepressants
Adolescence, late adolescence ≥12 years	Substance use disorders Bipolar disorder, psychotic conditions	Parent Young Mania Scale, clinical assessment	Motivational interview, specialist care referral Refer for specialist care

^aADHD, attention-deficit hyperactivity disorder; CBT, cognitive-behavioral therapy; IPT, interpersonal therapy; PHQ-9, nine-item Patient Health Questionnaire; SCARED, Screen for Child Anxiety Related Disorders; CRAFFT, screen for substance-related risks and problems of adolescents.

development; communicates clearly and concisely and provides seamless transitions of care; is adept at addressing subclinical, acute, and chronic illness presentations; teaches brief behavioral strategies and interventions to primary care team members; triages clinical care and follow-up in a time-sensitive manner; provides evidence-based psychotherapies with a flexible and adaptive approach within a limited amount of time; and is comfortable with flexible approaches to care due to high clinical demands during brief office visits within the medical home setting, including acceptance of mental health session interruptions. Depending on the care model's design, the pediatric mental health specialist would need to either provide some degree of care coordination services for families or collaborate with another team member who provides some care coordination services.

Psychiatric Consultant

The psychiatric consultant is usually a child and adolescent psychiatrist, adolescent medicine specialist, or general psychiatrist with expertise in psychopharmacology and therapeutic modalities involved in child mental health care. In the structure of the integrated mental health care team, the psychiatric consultant provides timely support, supervision, training, and consultation in a flexible manner for a range of requests, from single-case consultation to large population-based caseloads; defines team roles, provides training and cross-training within teams, and engages in addressing workforce issues, such as management alignment, conflict resolution, prevention of burnout, and quality improvement; teaches best-practice standards in a clear and succinct manner; demonstrates good communication skills; nurtures partnerships among providers; shares leadership and accountability of care and is willing to learn from mistakes;

demonstrates a tolerance for ambiguity when indirectly involved in care and is able to prioritize practicality over theoretical clinical guidelines when necessary; and advocates for patients and families, especially those with complex and chronic illnesses who are likely going to be involved in multiple systems of care.

SPECIALTY SKILLS FOR THE PEDIATRIC POPULATION

Pediatric Screening and Diagnosis

When general psychiatrists take on the role of consulting to child and adolescent mental health services within primary care, it is important for them to review evidence-based treatment guidelines for common mental disorders in child and adolescent mental health services and to utilize validated screening tools specific to the youth's developmental level (4) (Table 1).

Family Involvement

A generalist consultant must become comfortable in recognizing the role of parents as agents of change for young people and be able to partner with family systems to identify needs, set goals, and develop treatment plans while aligning them to their ward's care.

Developmental Focus

Psychiatric symptoms may reflect current developmental challenges, and they may simultaneously affect development in negative ways. Consultants should interpret psychopathology in the context of the child's development. Because exposure to adverse childhood events, such as trauma, may have lasting effects, identifying and recommending interventions for such exposures can help

TABLE 2. Selected Models of Integrated Care in Child and Adolescent Psychiatry

Model	Model Program	Behavioral Health Team	Pros	Cons
Behavioral health clinician model	Community Care of North Carolina (11)	On-site behavioral health clinician	Shared records, seen in real time, warm handoff, allows dedicated time for collaboration	May default to pure colocation if booked for too many individual services, more limited care coordination
Child psychiatry access programs	Massachusetts Child Psychiatry Access Project (12), Partnership Access Line (13)	Off-site psychiatric consultant or therapist, or both, or care coordinator	Population focused, immediate consultation, increased geographical access, regional educational programming	Telephone- or telemedicine-based consultation, no shared records, may have more systems issues for collaboration, funding more difficult
Collaborative care model	Doctor-office collaborative care (8); ROAD: IMPACT Team care model for depression (6)	On-site behavioral care manager and on-/off-site psychiatric consultant	Tracking registry, outcomes driven, shared records (if on site)	Emerging evidence base, funding more difficult

ameliorate the potential negative impact on developmental trajectories.

Systems of Care

Child and adolescent lives are entwined with numerous systems of care, including family, school, social welfare agencies, and legal systems. Consultants can play crucial roles in coordinating, consulting, and advocating for the child's mental health priorities across these systems.

Psychopharmacology Principles

There is a growing body of evidence for psychopharmacological approaches for children and adolescents, which should be consulted by practicing physicians prior to use. Extrapolating results from the adult literature should be done cautiously because children do not always respond to medications the same way as adults, owing to their developing brain. In prescribing, the adage of “start low, go slow” is usually best, along with being diligent in discontinuing any medications tried and found to be insufficiently effective. Utilizing evidence-based approaches with close monitoring for negative side effects is critical.

CURRENT MODELS OF CARE IN CHILD AND ADOLESCENT MENTAL HEALTH SERVICES

The need to provide integration between pediatric primary care and mental health services is well recognized, and both the American Academy of Pediatrics and American Academy of Child and Adolescent Psychiatry have proposed models for specialty collaboration (3, 11). Although there is a fairly extensive database in the adult literature, the child evidence base to identify the best means of providing integrated mental health care is still emerging. The few pediatric integrated care randomized studies have shown the models to be feasible, to be cost effective, and most important, to lead to superior health care outcomes in comparison

with usual care. In a 2015 meta-analysis of randomized controlled trials, Asarnow et al. (7) found a strong effect for collaborative care interventions, with a 73% probability that a randomly selected youth would experience better outcomes after receiving collaborative care than would a youth in the care-as-usual group. The meta-analysis included a wide variety of means of implementing integrated care. Three major models of pediatric integrated care, outlined below, demonstrate the current efforts toward fully integrated pediatric mental health care (Table 2) (14).

Behavioral Health Clinician Model

A behavioral health clinician (BHC)—typically a psychologist, social worker, or nurse practitioner—provides real-time collaboration and coordination of care, with the clinician colocated in the primary care clinic. When the PCP identifies the need for mental health services, the BHC is available within the practice to discuss care needs with the PCP and then to see the patient. It is ideal for the BHC to have immediate availability to see the patient to evaluate and recommend treatment options. When the PCP is able to introduce the patient to the BHC the same day, the “warm handoff” increases the likelihood of successful connections to community-based treatment. However, if the BHC does not have that much time free, the next best option is one in which the BHC introduces him- or herself to the family and makes a plan to follow up more with them later. When the BHC focuses primarily on assessments, brief interventions, and care coordination, availability is preserved for immediate consultations (11, 14). Psychiatrist consultation is typically provided off site, although some systems utilize a visiting medication provider on a weekly or monthly basis who can rotate through several primary care settings.

Model program—Community Care of North Carolina (CCNC). In 2010, North Carolina's Medicaid program employed a team of psychiatrists, BHCs, and pharmacists to help primary care

practices deliver better care. This was achieved through education outreach and enhanced communication between primary care and specialty care but also by utilizing a BHC colocated in the practices to provide enhanced screening and brief treatment (11). Initial reports demonstrated reduced costs and reduced emergency room use for children (15).

Benefits and limitations of the CCNC model. Benefits of the CCNC model include convenience for the patient/family, more immediate services for brief interventions, easier access to curbside and formal psychiatric consultations, reported increase in follow-through by patients, and comfort-providing services by the pediatricians, as well as regular communications between the pediatrician and the BHC.

However, the BHC may default to colocation without collaboration if providers are booked for too many individual services. Unless the pediatrician is comfortable handling medication management, referral is necessary in most settings. Other challenges include more limited care coordination, and no outcome data are yet available.

Child Psychiatry Access Programs

A child psychiatry access program (CPAP) works to improve access to care by providing a collaborative relationship between PCPs and regional child psychiatry teams that can offer consultation, care coordination, and educational programming (14). These programs have been growing, and in 2013 the National Network of Child Psychiatry Access Programs was started, representing CPAP programs in 28 states (16). These programs most commonly offer consultation via phone but also use e-mail, telepsychiatry, and more formal communication, both in writing and by in-person consultation. Some programs also offer brief psychotherapy interventions. The Massachusetts Child Psychiatry Access Project (MCPAP) and the Washington Partnership Access Line (PAL) are representative examples of CPAP programs.

Model program 1: MCPAP. The MCPAP was started in 2005 (12), modeled after a successful pilot project at the University of Massachusetts. MCPAP is a statewide system that supports collaboration between child psychiatrists and primary care doctors, with the goals of supporting the PCP as the frontline mental health provider and of improving access to mental health services. The state was divided into six regions, each of which had a consulting team based in an academic medical center. The MCPAP teams provide immediate informal telephone consultation, expedited formal outpatient consultation, assistance in coordinating and finding care for children in need of community mental health services, and continuing education about children's mental health designed for PCPs.

Benefits and limitations of MCPAP. Benefits of the MCPAP program include that it was widely utilized and PCPs voluntarily enrolled to participate, with panels covering 95% of the child population of Massachusetts. The PCPs

found the consultations useful, and there was a dramatic improvement in the number of PCPs who rated that they were able to meet the needs of children with psychiatric problems and were able to obtain timely child psychiatry consultation. This program also provided regional educational programming.

However, there are limitations to the program. Utilization rates varied significantly between PCPs and between MCPAP sites (17). Timing of enrollment, panel size, and distance from the MCPAP office influenced use patterns. This system is dependent upon ongoing public support because it is wholly funded in the Massachusetts state budget; however, recent legislation has mandated commercial insurance companies to contribute funding proportional to the utilization of the program for covered members.

Model program 2: PAL. In 2007 the Washington legislature voted to expand mental health services to children with Medicaid by establishing a telephone-based consultation program called the Partnership Access Line (13). This was modeled after the MCPAP program but was designed to fit a state with lower population density, lower per capita child psychiatrists, and less financial support. To do this, the PAL program uses a smaller centralized team of child psychiatrists, uses televideo sites for appointments in other areas of the state, and performs outreach via regional educational programming and an online care guide. They also provide social work assistance to help identify community mental health resources.

Benefits and limitations of PAL. A limited number of psychiatrists are able to reach more patients in geographically isolated areas with low population density, areas that would not typically support local specialist care. Consultation is normally available immediately. A study by Hilt et al. (13) showed high caller satisfaction, an increased ability to serve children with multiple and serious mental health problems, and improvement in providers' reported mental health management skills.

What is not reported is how closely the PCP or the families were able to follow recommendations from the PAL consultants. The system is instituted and supported at a state level, so systems issues and financing can be vulnerable. Community providers vary widely in their degree of utilization of the service.

Collaborative Care Model

Based on the models of integrated care used for chronic pain in adults, this model includes a team approach, with the PCP leading a team supported by an on-site care manager. The care manager helps in tracking patient outcomes and is able to arrange consultation from a psychiatrist (on or off site), who can provide in-person consultation and treatment recommendations for patients enrolled in the program who are not meeting target goals (14).

Model program 1: doctor-office collaborative care. The doctor-office collaborative care (DOCC) system studied by Kolko et al. (8) was a two-year pilot program that looked at using collaborative care to address behavior problems, attention-deficit hyperactivity disorder, and anxiety, with an on-site nursing intervention, a case manager who delivered and coordinated services, outcomes tracking, and evidenced-based medication guidelines for the PCP. The DOCC system also provided access to a child psychiatrist for case consultation. Kolko et al. compared this intervention with enhanced usual care (brief assessment and facilitated referral to the community). The DOCC program showed significantly greater use; improvement in individualized target behaviors; a decrease in oppositionality, inattention, hyperactivity, and functional impairment; and improved consumer satisfaction (8).

Model program 2: the ROAD intervention. The ROAD (Reaching Out to Adolescents in Distress) intervention is a collaborative care intervention based on the IMPACT (Improving Mood—Promoting Access to Collaborative Treatment) Team Care model (6). The ROAD intervention targeted adolescent depression, with an on-site depression care manager (master's-level clinician); enhanced patient/parent engagement and psychoeducation; patient choice for medication, cognitive-behavioral therapy-based psychotherapy, or both; and follow-up tracking of symptoms and weekly supervision by a team that includes a psychiatrist, psychologist, and pediatrician. If a patient's nine-item Patient Health Questionnaire score had not improved by 50% after four to eight weeks, the treatment was advanced with a stepped-care algorithm. The treatment was compared to the control group of study participants randomly assigned to receive enhanced usual care. These adolescents and their parents received letters summarizing results of their depression screening and were encouraged to initiate self-referrals for mental health treatment within their health care system. Their PCPs, as well, received testing results with recommendations for treatment. At 12 months, the intervention group was significantly more likely to achieve depression response (67.6% vs. 38.6%) and remission (50.4% vs. 20.7%).

Benefits and limitations of collaborative care models. Both of these models are outcomes driven, allowing clinicians and care teams to track patient improvement and identify patients who are not responding to treatment. Because psychiatric consultations are typically on site, records sharing may be easier than in traditional care.

Unfortunately, there are limited studies of these models in pediatric populations. Also, financial reimbursement limitations may make them difficult to sustain.

CHALLENGES FOR COLLABORATIVE AND INTEGRATIVE CARE

Although there is growing evidence to support the use of specific psychiatric integrative care models to expand access

to mental health services for children and adolescents, significant barriers to any widespread adoption and implementation of the aforementioned models remain. In 2009, the American Academy of Pediatrics and the American Academy of Child and Adolescent Psychiatry released a joint position paper highlighting some of these challenges that together provide a lack of incentive for PCPs to assume more of the burden of mental health care delivery (18).

A chief challenge for primary care mental health delivery is financial considerations. Specifically, concerns about fiscal parity between medical and mental health treatments, rules prohibiting "incident to" payments for employing a midlevel provider under physician supervision, and the inability to bill for non-face-to-face components of care and consultation (i.e., delivery of mental health screening measures, visits with parents only, or consultations between specialty providers and PCPs).

Another challenge is administrative hurdles inherent in the referral process, including the resistance of insurance providers to grant coverage for out-of-network mental health providers even if all in-network providers are full. The Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008, the passage of the Affordable Care Act in 2010, the publishing of rules to implement the MHPAEA in 2013, and the changes made to the Current Procedure Terminology psychiatry codes in 2013 have all been important in addressing some of these barriers. However, there is a significant learning curve to navigating these new rules and policies, and more education is needed. Additionally, as was discussed previously, there remains a shortage of qualified mental health providers in the community who can deliver many of the evidence-based interventions for which PCPs, and their mental health collaborators/consultants, refer their patients. Further complicating the matter, at the time of this writing the United States Congress is debating making changes to the Affordable Care Act or replacing it altogether. It remains unclear what impact, if any, these changes might have on reimbursement practices.

Despite gains achieved through recent legislation, funding for integrated and collaborative care models remains a significant challenge. None of the models outlined above are financially self-sufficient through routine fee-for-service reimbursement mechanisms; all rely on state-level initiatives or additional funding sources. The University of Washington's PAL program, for instance, is entirely reliant on funding through the Washington State legislature and state health care authority. Similarly, MCPAP is funded by a legislative appropriation in the Massachusetts Department of Mental Health budget. CCNC required statewide changes to Medicaid before its model could be viable. Because of the massive organizational efforts required to get these programs off the ground, it is no wonder that most of these initiatives have been borne out of larger public or academic health care systems. Ironically, larger systems such as these are by their nature reticent to consider or adopt changes that might force significant changes to existing care delivery models. In 2011,

CCNC published a report outlining cost savings associated with the program overall, including up to 15% savings for children ages 20 years and under. Unfortunately, the report did not include data about its behavioral health initiative specifically (15). More long-term population-level data for this and other programs is needed to prove financial viability and incentivize the adoption of new integrated and collaborative care models.

As we learn more about what works and what does not when it comes to integrated care for children and adolescents, new challenges have arisen. One significant logistical hurdle is the ability to easily share data between providers in a manner that is useful but also compliant with the Health Information Portability and Accountability Act. Although the problem of communicating electronically between providers is perhaps most clearly illustrated within a CPAP model, which by its nature connects clinicians from different systems, it is by no means exclusive to it. Even for the BHC and collaborative care models, which consist of on-site mental health providers who would presumably be using the same electronic record, matters such as documenting the results of an evidenced-based mental health measure in a way that is both accessible to individual team members and useful for outcome tracking requires significant customization of information technology infrastructure that for many practices would prove impractical (14).

ROLE OF TECHNOLOGY

Just as information technology represents one of the most significant barriers to the implementation of these models, it is also an essential part of scaling these programs to better meet the needs of the pediatric population. Telepsychiatry is an increasingly important means of mental health care delivery (19). For children and adolescents, it has been shown to be effective (20–22), comparable with in-person care (23, 24), tolerable (25), and with a short learning curve for providers (26). This modality can be an important aspect of the CPAP model, allowing direct assessment of challenging cases regardless of geographic settings. However, start-up costs remain a barrier for many community providers. As mobile technologies advance (and the implications for patient privacy are addressed), one can imagine this modality playing an increasingly important role in any collaborative care environment.

FUTURE DIRECTIONS

Although the aforementioned models of integrated and collaborative care for children and adolescents have shown promise, this is still a nascent field. In order to meet the growing needs for pediatric behavioral health care, we will need to further develop, improve, and disseminate solutions to the challenges discussed above to more effectively assist PCPs in providing a true medical home for their patients. Over time, as health care providers learn to better care for

youths with mental illness in a team-based manner, with child psychiatrists taking an important supporting role, efforts can eventually be steered toward the elusive goal of universal prevention.

There are many efforts underway on the federal, state, and local levels to expand opportunities for early learning, promote resilience, and nurture secure attachments in young people, all of which potentially have broad implications for mental health. Former President Obama's Early Learning Initiative and Project LAUNCH are two national examples. Most existing efforts in this area have focused on schools as the primary point of delivery, often placing an extra burden on an already taxed system. However, considering that health care providers are in a critical position to implement populationwide change, one can envision novel opportunities for collaboration with other child-serving systems (social service agencies, schools, juvenile justice systems) within the larger community. Furthermore, within medicine alone there remain many unexplored possibilities for mental health providers to partner with clinical subspecialties across the developmental trajectory (maternal-fetal medicine, obstetrics, pediatrics, adolescent medicine). Better identification of parents at risk for depression in the prenatal period and beyond, early intervention when disruptive behaviors emerge, and identification of those at risk for affective and psychotic illness before clinical symptoms manifest—all these efforts will require well-designed collaborative care networks. By refining and expanding collaborative care models that work, we build the foundation to one day achieve these goals.

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