STRATEGIES TO SUPPORT THE INTEGRATION OF MENTAL HEALTH INTO PEDIATRIC PRIMARY CARE
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One in five children and adolescents in the U.S. experiences mental health problems, and up to one-half of all lifetime cases of mental illness begin by age fourteen. Seventy-five percent of children with diagnosed mental health disorders are now seen in the primary care setting, making the management of mental health issues a growing part of pediatric practices. The increasing prevalence of mental illness among children, early age of onset, and emerging evidence about effective preventive interventions make a strong case for early identification and intervention. Pediatricians are well positioned to detect problems in a child’s social and emotional development due to their consistent presence in a child’s life, but the undersupply of mental health professionals trained to treat children, coupled with inadequate financing, mean that pediatricians are increasingly relied upon not only to detect problems but also to provide the full spectrum of mental health services without the tools and resources to do so effectively.

This paper provides an overview of research advances and policy trends that support integration of mental health into primary care and explores various strategies primary care providers and health plans can employ to achieve more coordinated and integrated mental health care in the pediatric primary care setting. While focused on the pediatric practice, much of the discussion is also relevant to others who provide primary care services to children, including family practitioners. The paper delineates the potential benefits of an integrated approach as well as the obstacles that must be overcome in order to provide children and their families with coordinated, seamless care that supports children’s emotional well-being.

Recent research in mental health, neurobiology and early childhood development strengthens the case for prevention and early intervention. The American Academy of Pediatrics’ Bright Futures practice guide outlines an approach to address developmental and mental health needs based on age and stage of development. The three levels of intervention necessary to provide a full spectrum of mental health care include: prevention and health promotion, early intervention and treatment. Delivering this full range of services may require multiple sources outside the practice but activities should be centralized around the primary care provider.

The financing and reimbursement of mental health services must be taken into account when considering integrating mental health into primary care practice. Most private and public insurers do not provide reimbursement for collaborative or integrative care and mental health benefits are often “carved out,” with primary care providers excluded from the network of providers who can provide and bill for mental health services. In recent years, health plans have begun to recognize the need to integrate physical and mental health, and many have brought behavioral health management activities in-house. Mental health services covered by private insurers in the primary care setting generally include screening, assessment and/or medication management. However, efforts to expand the content of pediatric care to address mental health often place new demands on the provider, and reimbursement for the additional time and services required to appropriately address mental health issues are often lacking.

Public sector funding for mental health services is provided through a combination of public insurance programs, federal grants to states, community health and community mental health centers, school systems, public health departments, and juvenile justice. While Medicaid Early Periodic Screening, Diagnostic, and Treatment (EPSDT) provisions require that all children be regularly screened and tested to identify any conditions requiring treatment, including physical, mental, emotional and
cognitive developmental delays, state Medicaid programs vary widely and only 60 percent of Medicaid programs reimburse for screening and assessment.

Although barriers exist in bringing mental health and primary care together, multiple public and private sector efforts are underway to promote and enhance integration. Recognizing the importance of integrating mental health services into primary care, the federal government, the American Academy of Pediatrics and private foundations are directly supporting initiatives to develop the evidence base, provide tools for primary care providers to implement mental health services and obtain appropriate reimbursement for their services, and pilot innovative programs supporting integration.

In considering whether and how to integrate mental health into pediatric primary care, a practice must consider what role they wish to play and what services they will provide directly. Examining issues related to their patient population’s needs, the size of the practice, existing resources, and the practice’s skills and interests can help the practice set a framework for considering specific strategies for integration. There are three broad categories of service models primary care providers may adopt in order to provide mental health services: consultation, co-location and collaboration. Consultative models allow providers, especially those working in rural or frontier communities, to consult with child psychiatrists using telemedicine or other means. Co-locating mental health specialists in the practice can improve access to care, streamline billing, and enhance care coordination and treatment planning. Collaborative care models build on the medical home model by establishing treatment partnerships between mental health and primary care providers. This approach often includes cross-disciplinary case conferencing, co-management of care and some form of care coordination. No one model is superior to the others—the model selected depends on the needs of the practice.

To date, private health plans’ efforts to enhance mental health and primary care collaboration have focused primarily on adults. Some plans, however, are addressing children’s mental health by offering training or disseminating educational resources, developing clinical guidelines and other tools for more common emotional and behavioral issues such as autism spectrum disorders and attention deficit-hyperactivity disorder, supporting telephonic or in-person consultations with mental health professionals, and implementing psychopharmacology quality initiatives to assure appropriate use of drugs and follow-up care. Plans are also providing outreach to patients identified through claims or employee assistance programs. Still others are involved in national or state efforts to address policy concerns related to coverage of mental health services and the relationship between primary care and medical home efforts.

The medical home model is a promising overarching framework for incorporating mental health care into primary care due to the partnerships established with the family and the ability to coordinate care with other health care providers, including mental health professionals. While there are barriers to overcome, policymakers, providers and health plans can take a number of steps to make integration a reality. Changes in both medical school education curricula and continuing education can enhance primary care capacity to provide mental health services. The need for improved reimbursement for mental health services in primary care could be alleviated by allowing a wider range of providers to bill for mental health services. Increasing financial support for primary care practices to adopt the models explored in this paper promises to improve dramatically the quality of care and collaboration among all providers caring for the emotional well-being of children. However, these models must also be evaluated to determine the extent to which they produce improved outcomes. Integrating mental health into primary care is an urgent concern, given the shortages of mental health providers, as is the need to continue to develop the evidence base for effective preventive and treatment strategies. Health plans, providers, federal agencies, researchers, and policymakers should all be partners in achieving more coordinated, effective mental health care for children in the primary care setting.
With 75 percent of children with diagnosed mental health disorders seen in primary care settings, addressing children’s mental health needs has become an increasingly important consideration for primary care practices as well as for health plans. Many pediatricians and family practitioners are finding that managing mental health issues is a growing part of their practices. The increased attention on the medical home, and its comprehensive approach to care, further emphasizes this role. However, the quantity and quality of the primary care provider’s interaction with mental health professionals are variable, and overall quality of mental health care is uneven. Private health plans and public payers traditionally focused on defining benefits, services, and other arrangements related to mental health services for adults, but are now faced with a growing awareness of the importance of addressing children’s mental health issues as well. This paper explores various strategies that can be employed by primary care providers, with the support of health plans, to achieve coordinated and integrated mental health care in the pediatric primary care setting.

The burgeoning interest in addressing children’s mental health needs reflects current trends in research, practice and policy. In 1999 The Surgeon General’s Report on Children’s Mental Health first elevated the nation’s attention to critical children’s mental health issues by focusing not only on diagnosable mental illnesses, but on the social, environmental, emotional and behavioral factors that influence the mental health of children and adolescents.1 The President’s New Freedom Commission on Mental Health identified the importance of better coordination between mental health care and primary care and the promotion of mental health of young children as important goals for the nation in 2003. Three years later, the Institute of Medicine issued a report further supporting the need for the effective coordination of care by health, mental health and substance abuse providers and calling for the identification of valid, age-appropriate screening tools and a continuum of evidence-based coordination models for children and youth experiencing mental health problems.2

Despite these recommendations and support for better coordination and integration of mental health care services, our delivery and care systems remain fragmented and are falling short of providing adequate prevention and treatment of children’s mental disorders. Children with mental health problems are served in multiple systems which often fail to communicate, share information and resources, and transition care smoothly from one system to the next. The result is overemphasis on expensive service providers and reactive, crisis-oriented interventions (sometimes resulting in the child’s removal from the home, school or child care setting) and insufficient focus on prevention, early identification, and timely treatment. The potential benefits of a better integrated approach to delivery of mental health services include early identification of emotional and behavioral problems, a coordinated approach to care, enhanced resources available to children and families, improved monitoring, and a collaborative approach to crisis management.3

The impetus for integrating mental health services into pediatric primary care is based on several key concerns: the growing need for mental health services for children; the significant undersupply of mental health professionals trained to serve children; policy, training and other barriers that limit primary care providers’ abilities to provide these services; and the inadequate financing of mental health services. Primary care physicians can play a unique role in addressing mental health needs. The following characteristics of pediatric practice make pediatricians well-suited to addressing mental health issues in children:1

1 While this paper is focused on the pediatric practice, much of the discussion is also relevant to others who provide primary care services to children including family practitioners.
Long-term relationships with children and families;

- Emphasis on development, early intervention and prevention;

- Changing morbidities that reflect increased mental and emotional conditions in the pediatric population;

- Experience working with specialists on behalf of children with special needs;

- Experience with chronic care principles and providing a medical home; and

- Understanding the access issues families may face for mental health services.  

In this paper children’s mental health is defined broadly as the “successful performance of mental functioning, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt and to change and to cope with adversity; mental health is indispensable to personal well-being, family and interpersonal relationships, and contribution to the community or society.” This definition incorporates the social, emotional and behavioral aspects of development and therefore expands the potential scope of services from treatment alone to prevention and health promotion and early intervention. This perspective considers mental health as an “integral part of effective primary care.”

To help in the consideration of appropriate strategies for pediatric primary care providers and health plans to integrate mental health into pediatric primary care, this paper provides:

- A brief overview of the prevalence of and risk and protective factors for children’s mental health problems;

- A discussion of the current state of prevention, early identification and treatment of mental health in pediatric primary care, including the relationships between primary care and mental health services;

- A review of public and private sector financing of mental health services for children and the implications for integrative approaches;
S E C T I O N  II: T H E C H I L D R E N ’ S M E N T A L 
H E A L T H L A N D S C A P E

Mentally healthy children and adolescents “develop the ability to experience a range of emotions (including joy, connectedness, sadness, and anger) in appropriate and constructive ways; possess positive self-esteem and a respect for others; and harbor a deep sense of security and trust in themselves and the world. Mentally healthy children and adolescents are able to function in developmentally appropriate ways in the contexts of self, family, peers, school and community.”

To determine the array of mental health services that may be provided in the primary care setting, it is important to understand the evidence supporting integration and the policy and programmatic context influencing primary care providers’ abilities to implement integrated services. The section begins with a discussion of the evidence supporting the integration of mental health into primary care, organized around two primary themes: the importance of the child’s age and developmental stage as a determinant of the types of interventions required; and the need for a comprehensive approach that includes overall mental health prevention and promotion, early intervention and treatment. We then review current public and private sector efforts, including financing and programmatic policies that influence approaches to integrating mental health services within the pediatric practice.

An Age-Based Framework for Understanding and Promoting Children’s Mental Health

Recent research in mental health, neurobiology and early childhood development strengthens the case for prevention and early intervention. For example, epidemiologic surveys reveal an early age of onset for some mental health disorders, while other studies point to an association between early symptoms and increased risk for mental health disorders in adulthood. Moreover, recent neurobiological research indicates that from infancy onward, children’s cognitive, emotional and physical development are linked to one another and are influenced by specific familial and environmental risk factors that may hinder the accomplishment of developmental tasks. Highlighted in Neurons to Neighborhoods, this research has prompted recognition of the importance of early developmental screening and interventions and issuance of related anticipatory guidance for pediatricians. It has also enhanced the understanding of the relationship between cognitive and emotional development in older children and adolescents.

Epidemiology

In the U.S., up to one in five children and adolescents experiences mental health problems requiring some form of mental health intervention. Of those children, about 15 percent have mild to moderate mental health problems, and five percent have severe emotional disturbances or diagnosable disorders that cause significant impairment of their functioning in the home, in school and with peers. Strikingly, up to one-half of all lifetime cases of mental illness begin by the age of 14 years. Exhibit 1 summarizes the most commonly diagnosed problems among children and adolescents by age of onset.

In addition to the disorders listed in Table 1, children are also subject to mental health problems related to trauma. While post-traumatic stress disorder (PTSD) does not generally present until early adulthood, one in four children will experience a traumatic event before the age of 16, and some of those children will develop child traumatic stress (CTS). If untreated, traumatic stress can have a damaging effect on a child’s development and functioning.
affects between five and eight percent of adolescents in a given year. One of the three major risk factors for childhood depression is having a parent with a mood disorder. Maternal depression is associated with behavioral problems, injury, ADHD, conduct disorder, violence and antisocial behavior in children. When mothers are depressed, they may not form secure attachments with their babies. Fortunately, there are a number of validated, reliable screening tools for maternal depression as well as home visiting, parenting and treatment programs that can help to improve parent-child attachment and ameliorate the impact of maternal depression on the child. Detection of depression in youth is now considered so important that the U.S. Preventive Services Task Force recommends screening of adolescents between the ages of 12 and 18 for major depressive disorder.

**Risk Factors**

Much progress has been made in pinpointing the protective and risk factors that affect the likelihood that a child or youth will develop a mental health disorder. Protective factors include a loving, stable family environment, economic security, positive educational environment, connections with schools and a healthy community. Risk factors include a parent’s chronic mental illness, maternal depression, poverty, child maltreatment, domestic violence, parental substance abuse and other traumatic family disruptions such as divorce. It is now known that early intervention and prevention to mitigate risks and enhance protective factors can positively impact health outcomes and school readiness and reduce health costs.

The example of childhood depression is illustrative of the importance and potential benefits of screening for known risk factors and intervening as soon as problems are detected. Although rare in young children, depression

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**TABLE 1: MOST COMMON DEVELOPMENTAL AND MENTAL HEALTH PROBLEMS IN CHILDREN, BY AGE OF ONSET**

<table>
<thead>
<tr>
<th>Age of Onset</th>
<th>Condition</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool(^1)</td>
<td>Speech Problems</td>
<td>5.8%</td>
</tr>
<tr>
<td></td>
<td>Developmental Delay</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>Autism Spectrum Disorders</td>
<td>0.5%</td>
</tr>
<tr>
<td>School-age Children (6-17 years)(^1)</td>
<td>Learning Disabilities</td>
<td>11.5%</td>
</tr>
<tr>
<td></td>
<td>Attention Deficit-Hyperactivity Disorder (ADHD)</td>
<td>8.8%</td>
</tr>
<tr>
<td></td>
<td>Behavior or Conduct Problems</td>
<td>6.3%</td>
</tr>
<tr>
<td>School-age Children (9-17 years)(^2)</td>
<td>Any Anxiety Disorder</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>Mood Disorders</td>
<td>7%</td>
</tr>
</tbody>
</table>


Strategies to Support the Integration of Mental Health into Pediatric Primary Care

an approach to address children’s developmental and mental health needs based on their age and stage of development. This perspective expands beyond mental illness to incorporate physical, social and emotional health, with a focus on prevention and promotion.

Table 2 is based on the authors’ review of documents and other advice from various organizations and experts to identify potential steps pediatricians may take to

**TABLE 2: IDENTIFYING MENTAL HEALTH CONCERNS IN PRIMARY CARE: BASIC TASKS BY STAGE OF DEVELOPMENT**

<table>
<thead>
<tr>
<th>Stage of Development and Developmental Tasks</th>
<th>Basic Tasks for the Primary Care Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infancy (newborn through 11 months):</strong></td>
<td></td>
</tr>
<tr>
<td>secure attachment; emotional regulation;</td>
<td></td>
</tr>
<tr>
<td>appropriate conduct</td>
<td></td>
</tr>
<tr>
<td>Screen for maternal depression and other</td>
<td></td>
</tr>
<tr>
<td>psychosocial risk factors such as domestic</td>
<td></td>
</tr>
<tr>
<td>violence and substance use; consider</td>
<td></td>
</tr>
<tr>
<td>poverty as a risk factor</td>
<td></td>
</tr>
<tr>
<td>Observe maternal-child interaction and</td>
<td></td>
</tr>
<tr>
<td>assess quality of attachment</td>
<td></td>
</tr>
<tr>
<td>Coordinate efforts with home-based</td>
<td></td>
</tr>
<tr>
<td>maternal and child health programs such as</td>
<td></td>
</tr>
<tr>
<td>Healthy Start</td>
<td></td>
</tr>
<tr>
<td><strong>Early childhood (12 months to 4 years):</strong></td>
<td></td>
</tr>
<tr>
<td>see above</td>
<td></td>
</tr>
<tr>
<td>Continue to screen for psychosocial risk</td>
<td></td>
</tr>
<tr>
<td>factors</td>
<td></td>
</tr>
<tr>
<td>Conduct routine surveillance for autism</td>
<td></td>
</tr>
<tr>
<td>spectrum disorders</td>
<td></td>
</tr>
<tr>
<td>Identify behavioral concerns in the home,</td>
<td></td>
</tr>
<tr>
<td>child care setting</td>
<td></td>
</tr>
<tr>
<td>Screen for speech, other delays, physical</td>
<td></td>
</tr>
<tr>
<td>problems that may be connected to</td>
<td></td>
</tr>
<tr>
<td>concerning behavior</td>
<td></td>
</tr>
<tr>
<td>Coordinate activities with child care</td>
<td></td>
</tr>
<tr>
<td>providers and early childhood programs</td>
<td></td>
</tr>
<tr>
<td><strong>Middle childhood (5 to 10 years):</strong></td>
<td></td>
</tr>
<tr>
<td>learning reading, writing, and math;</td>
<td></td>
</tr>
<tr>
<td>attending and behaving appropriately in</td>
<td></td>
</tr>
<tr>
<td>school; empathy; getting along with peers;</td>
<td></td>
</tr>
<tr>
<td>self-efficacy</td>
<td></td>
</tr>
<tr>
<td>Conduct surveillance and targeted screening</td>
<td></td>
</tr>
<tr>
<td>for ADHD, anxiety, depression, conduct</td>
<td></td>
</tr>
<tr>
<td>disorders</td>
<td></td>
</tr>
<tr>
<td>Coordinate activities with schools and</td>
<td></td>
</tr>
<tr>
<td>child welfare as indicated</td>
<td></td>
</tr>
<tr>
<td><strong>Adolescence (11 to 21 years):</strong></td>
<td></td>
</tr>
<tr>
<td>healthy physical development; intellectual</td>
<td></td>
</tr>
<tr>
<td>development and critical thinking skills;</td>
<td></td>
</tr>
<tr>
<td>self-esteem; positive relationships with</td>
<td></td>
</tr>
<tr>
<td>peers and family; attachment to social</td>
<td></td>
</tr>
<tr>
<td>institutions</td>
<td></td>
</tr>
<tr>
<td>Screen for behavioral and emotional issues</td>
<td></td>
</tr>
<tr>
<td>as well as co-occurring substance use</td>
<td></td>
</tr>
<tr>
<td>disorders</td>
<td></td>
</tr>
<tr>
<td>Coordinate these activities with other</td>
<td></td>
</tr>
<tr>
<td>systems involved with youth such as</td>
<td></td>
</tr>
<tr>
<td>schools, juvenile justice and child welfare</td>
<td></td>
</tr>
</tbody>
</table>
increase the child’s ability to accomplish developmental tasks associated with positive development and prevention of mental, emotional and behavioral problems.\textsuperscript{20, 21, 22} These steps include conducting age-appropriate screening, assessing the child’s environment, and coordinating with other sectors that share responsibility for the child’s development.

**From Mental Health Promotion to Treatment: A Full Spectrum of Care**

The scope of primary care practice encompasses a wide range of activities, including promoting wellness, preventing illness, and diagnosing and treating illness when it occurs. A similarly wide range of activities is required for a practice to address children’s mental health needs. This comprehensive approach must take into account the full range and intensity of social, emotional and behavioral problems affecting children and youth. Such an approach requires strategies targeted to various levels of need and coordinated among the systems serving those children. Three levels of intervention in children’s mental health include:

- **Prevention and health promotion**: promotes optimal social and emotional development and emotional wellness, builds resilience in children and youth, and reduces stigma related to needing and receiving mental health services for all children.

- **Early intervention**: focuses on early detection of mental health problems and interventions for both children and their families in order to prevent or mitigate the adverse effects of emerging child mental health problems.

- **Treatment**: psychopharmacologic and therapeutic services for children and youth who are diagnosed with specific mental health disorders.

In addition, as pediatricians and other primary care providers take on the role of a medical home, they are assuming greater responsibilities for the coordination of care for their patients. As the health professionals who are most consistently present as a child grows and develops, pediatricians can play a critical role in surveillance, screening and ongoing management of children’s emotional and behavioral problems. As Figure 1 illustrates, caring for a child’s mental health involves all three levels of intervention. This full range of services is provided by multiple sources including but not limited to the primary care provider.

**Prevention and Health Promotion**

Systematic surveillance and developmental screening help pediatric practitioners to monitor the overall well-being of their young patients. Working closely with parents and other supportive resources to identify concerns regarding parenting and helping parents to obtain treatment for their mental health and substance use disorders can help prevent mental health problems in children. Professional associations may extend these activities to include public education surrounding the benefits of prevention.

**Early Intervention**

One of the most important roles of the pediatrician is to identify medical, developmental, emotional and behavioral problems in children as early as possible and to treat them or link them to specialty care. The fields of mental health and child development have contributed to a proliferation of valid, reliable measures of children’s social and emotional development, as well as measures of the quality of maternal-child attachment and psychosocial risk factors for child mental health problems. However, use of such instruments in primary care has been limited. One recent survey of developmental screening found that over 70 percent of pediatricians used clinical assessment without an accompanying standardized instrument.\textsuperscript{23} Although the effectiveness of such clinical assessment in identifying emotional and behavioral problems requires further evaluation, research points to the superiority of using standardized instruments rather than relying on clinical judgment alone to detect mental health issues.\textsuperscript{24} In response to such findings, the American Academy of Pediatrics has set as one of its goals the development of a mental health tool kit that will include “current best choices” in screening tools for detecting mental health issues in children.\textsuperscript{25} For children identified as at risk for or having mild behavioral and emotional problems, short-term interventions, mental health consultation, and collaboration with child care and other providers can often address problems before they become severe.
FIGURE 1. MENTAL HEALTH CARE CONTINUUM

<table>
<thead>
<tr>
<th>Promotion and Prevention</th>
<th>Early Intervention</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus: No problems/&quot;typical&quot;</td>
<td>Mild to Moderate Problems</td>
<td>Diagnosed Mental Health Disorder</td>
</tr>
<tr>
<td>Routine, systematic surveillance and screening</td>
<td>Targeted assessment for positive screens</td>
<td>Comprehensive assessment, diagnosis, and referral to specialist</td>
</tr>
<tr>
<td>Social/emotional skill building</td>
<td>Intensive parent skills training</td>
<td></td>
</tr>
<tr>
<td>Developmentally-based parent education (Home visiting, early education)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public education and awareness</td>
<td>Mental health consultation</td>
<td>Problem-specific education</td>
</tr>
<tr>
<td></td>
<td>Provider training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short term counseling and support for children with mild to moderate problems</td>
<td>Individual, family, group therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Therapeutic child care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medication management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crisis intervention, hospitalization</td>
</tr>
<tr>
<td>Identification of and treatment for mental health and substance use disorders in parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Care coordination: referral and follow-up; linkage to ancillary support services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multidisciplinary treatment planning/Coordination with specialty services</td>
</tr>
</tbody>
</table>

Sources:

Treatment
How the pediatrician manages ongoing mental health issues is dependent on a number of factors, such as the availability of child-focused mental health specialists (including child psychiatrists), family and youth preferences, and the severity of the mental health problem. Bright Futures recommends that primary care providers refer to mental health specialists when the child’s functioning at home, in school and with peers is impaired, and when the patient is suicidal, exhibits psychosis or does not respond to office-based treatment. However, a recent study found that pediatricians had difficulty obtaining outpatient mental health services for their patients because of health insurance barriers, such as limited provider networks and administrative requirements, rather than due to a lack of coverage for such treatment. The study also cited a severe shortage of child and adolescent psychiatrists. This lack of access to outpatient mental health services poses a further problem for pediatricians as they are faced with treating mental health disorders and are increasingly prescribing psychotropic medications, raising concerns about whether or not pediatricians are adequately trained in this area. For children and youth with severe
emotional disturbance, comprehensive care necessi-
tates coordination among all of the providers working
in different systems to achieve similar goals. Pediatric
providers, then, need to be aware of and engage with
schools, social service, juvenile justice and child welfare
providers in their communities to reinforce and enhance
their own efforts.

Financial and Programmatic
Considerations for Integrating Mental
Health into Pediatric Primary Care

In 2005 an estimated $14 billion was spent on children’s
mental health and substance abuse programs through
private insurers and employers, state and local general
revenues, and various federal programs such as Medicaid,
the Children’s Health Insurance Program (CHIP), various
block grants and categorical programs. Financing of
mental health services for children therefore reflects a
range of policies and practices that differentially impact
the types of services available and the ability to integrate
mental health services into primary care.

This section briefly reviews private and public financing
of primary care and mental health services and other
public initiatives that financially support integration of
mental health and primary care. Additional resources
and further details on the growing number of efforts in
this area may be found in the Appendix.

Paying for Services: Private and Public
Insurance

In 2007, 55 percent of children were covered by
employer-sponsored plans, four percent through
individual coverage, 29 percent by Medicaid and other
public programs, and 11 percent were uninsured. The
recent reauthorization of CHIP is expected to provide
coverage for an additional four million uninsured chil-
dren by 2013. Current losses of private coverage due to
increasing unemployment and greater public coverage
due to expansion of public programs such as CHIP will
likely increase those covered by public programs. Earlier
data indicate that among children with some form of
health insurance, only two percent did not have any
mental health coverage. New parity legislation passed
as part of the Emergency Economic Stabilization Act
of 2008 may further impact available coverage and
reimbursement for children’s mental health services as
health plans providing mental health benefits will need
to address parity issues.

The large number of private plans and the variations in
individual state Medicaid programs create a complex
array of benefit structures, regulations and mandates,
resulting in considerable variability in children’s
primary care and mental health benefits. Managed
care arrangements add to the confusion facing primary
care providers and mental health providers as they
develop appropriate plans to serve their patients and
determine how to interact with each other and obtain
reimbursement for their services. In particular, payers
that “carve out” mental health benefits often exclude
primary care providers from the network of providers
who can deliver and bill for mental health services.
This arrangement may create a disincentive for mental
health screening and assessments as part of the primary
care visit. Additionally, most private and public plans
fail to recognize the importance of collaborative and
team efforts in the integration process and therefore
generally do not provide any reimbursement to support
these integrative efforts. Further barriers are restric-
tions on billing on the same day for multiple visits and
the need for more standardized approaches that will
permit billing for these visits.

Private Insurance. Although more children are covered
under private insurance plans than public programs,
private plans pay less than half of the total costs of
mental health services for children in the U.S. Estimates
indicate that this is due to higher per-child costs for
mental health services paid for by Medicaid. While recent
summary data on benefits and level of reimbursement are
not available, mental health services covered by private
insurers in the primary care setting generally include
screening, assessment and/or medication manage-
ment. Efforts to expand the content of pediatric care to
include screening, assessment and related interventions
for mental health issues are placing new demands on
the pediatric primary care provider. The adequacy of
reimbursement is an obstacle to expanding the services
provided during well child visits. A recent paper by the
American Academy of Pediatrics and the American
Academy of Child and Adolescent Psychiatry highlights
the various inadequacies in payment including lack of
coverage for many mental health services that are or
could be provided by pediatricians, limited coverage for certain services and the lack of incentives for multidisciplinary approaches.38

In recent years, health plans have begun to recognize the need to integrate physical and mental health. Indicators of changes in policy and service structure include health plan efforts to bring their behavioral health management activities in-house and creation of more coordinated medical and behavioral approaches that expand the role of primary care physicians.37, 38 These efforts have largely focused on adults and on the most prevalent conditions, such as depression. Initiatives include developing protocols for primary care providers to identify and treat common chronic behavioral health conditions, increasing consultative services, and conducting pilot programs to test different interventions.

Efforts to address specific children’s mental health issues, primarily by larger insurers and some locally-based health plans, are more recent. These efforts include reimbursement for developmental screening for all children and condition-specific programs focused on issues such as eating disorders, ADHD, mild depression and autism. In addition, various consultative services are targeting the increased use of drugs to treat various conditions. Examples of some of these new efforts are highlighted in Section III of the paper.

Public Insurance. In the public sector, funding for mental health services is provided through a combination of public insurance programs and federal and state initiatives. The largest public programs, Medicaid and CHIP, provide support for primary care and mental health services for 29.3 million and 6.6 million children, respectively.39 Under both programs the federal government defines minimum benefits and provides partial funding. States are responsible for the rest of the program funding and may vary their benefit packages and approaches to providing mental health services beyond the minimum benefit standard. CHIP generally provides more limited mental health benefits than state Medicaid programs.40 Both programs frequently use managed care arrangements to provide services, either for their overall program or for mental health benefits specifically.41 Other public funding is through the Department of Defense’s TRICARE program, which covers children of military families. TRICARE includes HMO, PPO and fee-for-service options, which all vary in terms of coverage for mental health services.

Medicaid covers nearly three out of every ten [28 percent] children with diagnosed mental health problems.42 As such, Medicaid is the major driver of children’s mental health fiscal policy and has become the major payer of children’s mental health services, especially for children with major mental health disorders.43 State Medicaid programs vary greatly in their support of children’s mental health services, including the extent to which preventive services are reimbursed and the role of pediatric primary care providers in providing services directly. Another key difference among states relates to the Early and Periodic Screening, Detection, and Treatment (EPSDT) program, which is an important tool for addressing mental health under the Medicaid program. EPSDT requires regular screening and testing of all Medicaid children to identify any conditions requiring treatment, including physical, mental, emotional and cognitive developmental delays. These services are usually provided by the pediatric primary care provider and Medicaid requires that if a need is detected, services must be provided. While EPSDT is a potentially important platform for supporting services, states have chosen different approaches to meet the screening, treatment and follow-up requirements.44, 45, 46 Studies have shown that only 60 percent of Medicaid programs reimburse for the use of screening and assessment tools for young children and few provide reimbursement to non-physician providers.47

Some states also use the Medicaid Home and Community-Based waiver program in order to shift services for children and youth with severe emotional disturbance from inpatient settings to home-based and community settings. These waivers have paved the way for children and youth to be served in the least restrictive setting possible. Wraparound Milwaukee is an example of a program that blends Medicaid waiver funding and state mental health, juvenile justice, and child welfare funds to address more systematically the needs of children with serious mental illness. It also provides services for children in foster care and children with developmental disabilities.48

Most states implement some type of managed care for children and adolescents in their public programs.
by contracting with managed behavioral health care organizations. While carve-outs often expand services, benefits and the use of evidence-based care, pediatric primary care providers are typically not included in the network, making it difficult to consider strategies to integrate mental health into primary care. One example of an effort to address this barrier is Connecticut’s Behavioral Health Services in Pediatric Primary Care initiative, which was designed to increase access to mental health services for children and to integrate mental health and primary care explicitly. ValueOptions, the Medicaid managed behavioral health care provider in Connecticut, provides a 25 percent increase in reimbursement to mental health clinics that successfully partner with pediatric practices to achieve increased access and integration.

Other policy changes implemented by states to promote integration of mental health into primary care include reimbursement to embed behavioral consultants in primary care teams, creation of a network of psychiatric consultants for primary care providers, and provider training for mental health assessments. While a number of states are developing creative approaches to delivering mental health services for publicly-insured children, there continue to be significant barriers to addressing mental health needs effectively in the primary care setting. Primary care providers often have difficulty billing for mental health services due to the need to be certified to provide mental health services, a situation that is further complicated by the complexities of the billing process. Little incentive exists to address integration through collaborative care and team approaches since reimbursement policies do not support these time-consuming efforts and often provide no or limited payment for related care coordination and case management activities.

Other Federal and State Support for Mental Health Services
In addition to the public insurance programs, the federal government provides other financial support for children’s mental health directly and indirectly through various block grants to states, support of delivery systems such as community health and community mental health centers, and support for services through the school system. These efforts include:

- The Community Mental Health Block Grant program, of which an estimated $147 million supports state programs for children and adolescents with severe emotional disturbance;
- The Comprehensive Community Mental Health Services Grants for Children and Families, with over $104 million in grants to localities and states to develop systems of care;
- The Individuals with Disabilities Educational Act (IDEA), supports mental health services for children who have specific conditions including autism, developmental delays, mental retardation and emotional disorders; and
- The Real Choice program from the Centers for Medicare and Medicaid, which includes 21 grants for children and youth with serious emotional disturbance.

States are also exploring broader strategies to address the range of issues involved in assuring that more comprehensive approaches to addressing mental health prevention, early intervention and treatment services for children are available. One example is ClinicPlus in New York which has been developed to provide evidence-based early identification and intervention for children and youth. The program also expands access to treatment and slots for home and community-based waiver services. The state has helped to address reimbursement barriers in this program by increasing fees for assessments and in-home treatment. An important component of this effort is its requirement that providers use standardized assessment tools and other evidence-based practices. The state has also allocated some of its federal funds through the National Institute of Mental Health to support a center that disseminates information on evidence-based practices.

Initiatives Supporting Integration of Mental Health Services into Pediatric Primary Care
This section describes some of the current efforts that go beyond simply supporting mental health services to supporting actual integration of mental health services into pediatric primary care.
Federal Efforts
Current policy and program efforts have attempted to improve the delivery of children’s mental health services, but these initiatives have not yet resulted in the systemic changes required for all pediatric practices to embrace an integrated approach to mental health and primary care. However, the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Health Resources and Services Administration (HRSA) continue to support local and state efforts to help different child-serving systems build collaborative relationships that result in more integrated, streamlined mental health care. Based on whether the primary funding source is mental health, primary care, maternal and child health, education or welfare, the emphasis and starting point for the efforts vary. Some of these initiatives are demonstration projects that are helping develop the evidence base for integration, while others are technical assistance projects intended to assist in the implementation of integration through the development of guidelines, tools and training to support enhanced roles for primary care practitioners. These federal agencies also support resource centers that serve as focal points for information and support to practitioners and others. More detailed information is included in the Appendix.

American Academy of Pediatrics
In addition to efforts at the federal level, considerable activity is underway within the private sector among professional groups and foundations. The American Academy of Pediatrics’ (AAP) identified children’s mental health as a strategic priority in 2004. A Task Force on Mental Health was formed to provide leadership and guidance to primary care clinicians for addressing mental health concerns within the medical home. The current activities of the Task Force include identifying mental health competencies required for pediatric primary care clinicians, identifying strategies for enhancing mental health care at the community and practice level, providing skill building and educational opportunities, and developing new clinical tools. These tools include algorithms that primary care clinicians can use to promote mental health, identify problems, engage patients and their families, identify further needs for assessment, and assess care for children with identified problems. Primary care guidance is being developed for learning disabilities, substance use, inattention and impulsive behavior, depression, anxiety, disruptive behavior and aggression. The AAP also has a policy statement Identifying Infants and Young Children With Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening which is focused on children 0-3 and provides a framework for these services, including identification of specific screening tools and information on how to select appropriate tools and CPT codes to use to bill for services.54

In addition, AAP’s Task Force on Mental Health, with support from a grant from the Health Resources and Services Administration’s Maternal and Child Health Bureau, has produced “Strategies for System Change in Children’s Mental Health: A Chapter Action Kit,” which describes steps state chapters can take to promote mental health and primary care integration for children. The kit addresses a number of areas, collaboration with mental health professions, including partnering with child-serving agencies, partnering with families, and efforts to address financing for services. Contracts have been made to select state chapters that are pursuing innovative programming to support individual pediatric practice efforts to integrate mental health services.55 Examples of promising initiatives sponsored by two state AAP chapters are:

- **Mississippi Chapter** is assessing mental health service needs in the Jackson area and will prepare a resource directory based on information from the State Department of Health and conduct a survey using Chapter Kit tools. They will engage primary care, mental health providers and others to address and implement collaboration, information sharing and other activities that will support better integration of services.

- **Oregon Chapter** is working with the Oregon Council of Child and Adolescent Psychiatry to address the infrastructure and other supports needed for enhanced pediatric and mental health collaborations. Their efforts build on dialogues on mental health in primary care and support consultation teams that bring child psychiatric services to pediatric practices. Finally, they expect to address the policy barriers preventing the systems changes necessary to sustain mental health integration in pediatric primary care.
As more chapters engage in these types of activities, they will be able to provide resources to pediatric practices interested in expanding their efforts to provide mental health services to their patients. In addition, the efforts to address policy changes, including reimbursement practices in their states, will help address current barriers to providing these services.

Bright Futures, now housed within the AAP, is the major practice guide that supports pediatric care and includes a specific module on mental health. Originally initiated in 1990 with the support of the Maternal and Child Health Bureau, it was developed with considerable input from health and mental health stakeholders, including consumers. The guide, recently revised in 2008, provides specific suggestions for primary care pediatric practice and for collaborative practice between primary care pediatricians and a range of professionals (e.g., developmental specialists, child psychiatrists, psychologists, social workers). It covers four areas of service tailored to the child’s stage of development: 1) screening and assessment, 2) health promotion and education, 3) interventions, and 4) care coordination. While the guide provides various strategies to implement its recommended actions, only an estimated 38 percent of children receive these and other recommended services for well child visits.56, 57

Most recently, AAP, working with the American Academy of Child and Adolescent Psychiatry, developed a joint position paper supporting integration of mental health services for children and adolescents into primary care and addressing the administrative and financial barriers to these efforts. A set of underlying principles in support of integration activities has been endorsed by both professional groups and the National Business Group on Health. Finally, the position paper delineates issues, barriers and potential solutions, including fifteen recommendations for action by purchasers, payers and managed behavioral health organizations.58

**Foundations**

Foundations have become an important source of innovative strategies to address children’s mental health. Grantmakers in Health reviewed the role of foundations in this area and highlighted a number of efforts that focus on early childhood prevention and early intervention, school-based initiatives, investments in building capacity, and systems change.59 Among the initiatives that directly impact the potential integration of mental health services into pediatric primary care are:

- **Assuring Better Child Health and Development (ABCD) program**, supported by the Commonwealth Fund, has developed and tested various strategies to improve the care of young children at risk for, or with, social or emotional development delays. Grants under this program have focused on preventive or early intervention services and have provided resources to support pediatric providers’ use of validated screening tools and the integration of those tools into practice through learning collaboratives, training and mentoring efforts. Grants have also addressed the development of resources for appropriate referrals to follow-up services and promoted systems change at the state level.

- **The Integrated Health Care Initiative**, sponsored by the Hogg Foundation for Mental Health, is supporting collaborative models of care that address a holistic approach to care by primary care and mental health providers. Collaborative care models were adopted by five grantees to support the treatment of mental health problems in the pediatric or primary care setting. These grantees include a public health system, community clinics, federally qualified health centers, and a non-profit pediatric practice. The evaluation currently underway is expected to provide important lessons about what is needed to implement collaborative models successfully.

- **Healthy Steps**, originally supported by the Commonwealth Fund and the Robert Wood Johnson Foundation, with co-sponsorship from the AAP, is being expanded with the help of a large number of funders. This program is designed to support the integration of child development specialists into primary care. Developmental specialists embedded in primary care practices can improve physical, emotional and intellectual development of children by assuring the provision of preventive and developmental services. Longitudinal evaluation of the initial fifteen sites has shown major benefits in terms of parental abilities to address issues and practice improvements for a modest increase in costs.60
Implications of Public and Private Sector Efforts for the Provision of Children’s Mental Health Services in Pediatric Settings

The previous discussions strongly suggest that the current environment provides opportunities for integrating mental health into primary care. Multiple efforts are underway to address integration and provide a base for exploring new and expanded opportunities to improve the quality of and approaches to delivering mental health services within the pediatric primary care setting. Increasing emphasis on prevention, the need to address body and mind holistically, and the growing evidence base in prevention and treatment are likely to support the growth of strategies to integrate mental health into pediatric primary care.

The examples of public and private integrative efforts described in this section illustrate some of the challenges inherent in bringing together mental health and primary care, but also outline strategies intended to overcome these barriers, such as more creative approaches to reimbursement, support for testing new approaches, building the evidence base, and developing tools to support increased integration of mental health into pediatric practice. The next section addresses more specific strategies pediatric practices and health plans might consider to further these strategies and highlights examples currently being implemented.
SECTION III: STRATEGIES TO IMPROVE EARLY IDENTIFICATION AND TREATMENT FOR CHILDREN IN PRIMARY CARE

The current environment for pediatric primary care providers is a complex and challenging one in which multiple factors influence their ability to meet the needs of the children and families they serve. Pediatric primary care providers generally serve as the medical home for their patients. The AAP defines the medical home as primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate and culturally effective. Medical homes enable the primary care provider to address the myriad needs of their patients and families in one setting.

Through the partnership established with the family and other providers, it is anticipated that the primary health care professional will enhance family/patient access and coordinate specialty care, educational services, in and out of home care, family support, and other public and private community services that are important to the overall health of the child/youth and family (Figure 2).

Originally developed to address the complex set of services needed by children with special health care needs, the medical home is now recognized as the standard of care for all children as well as for adults. Building medical homes often incorporates the use of technology, such as electronic health records, implementation of care coordination strategies, and linkages with other resources in the community. As defined, medical homes provide a strong basis for integrating mental health into primary care practice. Issues discussed earlier regarding reimbursement and other financial issues are also a concern when considering the medical home concept. Although some payers are beginning to recognize and pay for some of the additional costs of the medical home, there is still a

Figure 2. Components of a Medical Home

- A partnership between the family and the child's/youth's primary health care professional
- Relationships based on mutual trust and respect
- Connections to supports and services to meet the non-medical and medical needs of the child/youth and their family
- Respect for a family's cultural and religious beliefs
- After hours and weekend access to medical consultation
- Families who feel supported in caring for their child
- Primary health care professionals coordinating care with a team of other care providers

Source:
considerable gap in support for many of the aspects of delivering this more comprehensive model.

This section explores a variety of strategies to improve the ability of the primary care system to address children's mental health. First, considerations in defining the practice's role and approach to addressing mental health needs are discussed. Then, three promising approaches to addressing mental health needs in the primary care practice are presented, namely consultation, co-location and collaborative care models. Finally, the current and potential roles of health plans and other payers are reviewed.

**Determining Whether and How to Integrate Mental Health into A Pediatric Practice**

Most primary care providers manage emotional and behavioral problems in the context of well child visits, often without the training and tools necessary to identify and treat behavioral health problems. In underserved areas they may operate without the support of mental health specialists to address even the most severe problems. In order to address these issues, many private practices, community-based health centers and some health plans are beginning to take concrete steps to restructure their practices to better serve children and adolescents with emotional and behavioral problems. The strategies they select for integrating primary care and mental health services depend in part on how comprehensive an array of services the practice would like to provide.

There are many possible answers to the question of what specific roles pediatric primary care can play in addressing mental health needs. Individual practitioners and practices will need to determine the role they wish to play, including the services they wish to provide directly. Determining “how and how deep” will reflect a number of general and specific considerations. Table 3 represents the key areas primary care providers may wish to assess prior to determining how to address mental health in their patient population.

### TABLE 3: DEVELOPING A PRACTICE’S APPROACH TO ADDRESSING MENTAL HEALTH NEEDS

<table>
<thead>
<tr>
<th>Assessment Area</th>
<th>Questions</th>
</tr>
</thead>
</table>
| Assessing the service needs of the patient population | - What is the patient profile (age, demographics, insurance status, family composition, environmental factors and other characteristics likely to impact the need for mental health services and approaches to delivering those services)?
- How culturally/ethnically diverse is the population?
- Are there specific problems the practice is seeing?
- How extensive is the use of psychopharmacological treatments among the patient population?
- Are there areas that are likely to need more emphasis given the age composition (e.g., early development versus adolescent issues such as eating disorders, depression)?
- What do the answers to these questions imply for prevention, early intervention and treatment approaches? |
<table>
<thead>
<tr>
<th>Assessment Area</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing the practice: current practices, interest and capacity to address mental health needs</td>
<td>- How is the practice currently handling mental health needs of its patients?</td>
</tr>
<tr>
<td></td>
<td>- Is there an interest in expanding current services?</td>
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<tr>
<td></td>
<td>- What is the skill and comfort level of the current providers?</td>
</tr>
<tr>
<td></td>
<td>- Are there readily identifiable and accessible mental health resources in the community?</td>
</tr>
<tr>
<td></td>
<td>- Are there existing relationships with mental health providers?</td>
</tr>
<tr>
<td></td>
<td>- What are the physical issues involved, such as space?</td>
</tr>
<tr>
<td></td>
<td>- What new services can the practice support given its size and cost structure?</td>
</tr>
<tr>
<td></td>
<td>- What are the implications given the patient population (age groups, specific conditions, etc.) the practice wishes to address?</td>
</tr>
<tr>
<td></td>
<td>- What infrastructure changes would be required to expand services or implement integration (technology, care coordination mechanisms, privacy issues, etc.)?</td>
</tr>
<tr>
<td></td>
<td>- How can the practice address family mental health issues that impact healthy childhood development?</td>
</tr>
<tr>
<td></td>
<td>- How can high quality prevention and early intervention services in mental health be tailored to address diverse patient populations?</td>
</tr>
<tr>
<td></td>
<td>- What issues need to be addressed with payers?</td>
</tr>
<tr>
<td>Identifying existing external factors that will impact the approaches taken</td>
<td>- How do current policies of the state and payers related to reimbursement, service requirements and professional practice affect decisions about practice changes?</td>
</tr>
<tr>
<td></td>
<td>- What are the current standards of care that need to be met?</td>
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<td></td>
<td>- What resources are available to support the practice (e.g., tools and resource guides, training)?</td>
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**Strategies for Integrating Mental Health and Pediatric Care: Current and Promising Practices**

Examining issues related to the patient population’s needs, existing resources and the practice’s skills and interests can help set the framework for considering specific approaches to meeting the mental health needs of a practice’s patient population. Potential service models for the provision of mental health services fall into three broad categories: consultation, co-location and collaboration (Table 4). Rather than being mutually exclusive categories, these strategies represent a continuum of service approaches that may be employed individually or in combination. Decisions about how to use these approaches depend on a variety of factors including patients’ diagnoses and severity of symptoms, the provider’s goals, size of the practice, and the setting in which they operate (e.g., clinic, private practice, hospital, health maintenance...
Cross-training of both mental health and primary care providers to: a) discuss sensitive topics and motivate families to engage in treatment, b) identify and treat behavioral health issues in children and adolescents, c) focus on families’ strengths and accept the family as a partner in treatment, and d) make a diagnosis in the context of a family’s beliefs that shape their approach to health and illness.

Using standardized, validated screening and assessment tools to improve early identification and organization. This section describes the merits and limitations of these three approaches to integrative care and provides illustrative examples of each approach.

The models described above may be enhanced by a number of strategies that integrate staff across disciplines, increase capacity for primary care providers to assess and treat mental health problems in children and adolescents, and enhance coordination of care across systems. Examples of these strategies include:

<table>
<thead>
<tr>
<th>Approach</th>
<th>Description</th>
<th>Benefits</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>Mental health experts are available by telephone or videoconferencing to provide consultation on medication management and (in some cases) direct mental health consultation to children and families and referral to local mental health specialists.</td>
<td>Increases pediatric access to child psychiatrists and other child mental health specialists, particularly in underserved communities with mental health workforce shortages; improves prescribing practices.</td>
<td>Does not provide psychotherapy and evidence-based child mental health services.</td>
</tr>
<tr>
<td>Co-location</td>
<td>Primary care and mental health clinicians are physically located in the same treatment setting. Mental health providers may be independent practitioners or co-located in primary care but employed by mental health, schools or other systems.</td>
<td>Can reduce the wait for mental health services; may increase the likelihood that families will follow through with mental health treatment.</td>
<td>Co-location does not guarantee collaboration or an integrated approach to practice.</td>
</tr>
<tr>
<td>Collaborative and integrated service models</td>
<td>Primary care practice has mental health clinicians on staff who assess and treat children and families, provide phone consultation to other systems, and facilitate case conferences. Integrated practice recognizes the link between medical and mental health in every primary care encounter and provides integrated care for co-occurring conditions.</td>
<td>A comprehensive approach that enables primary care to provide the full continuum of services: screening, assessment, and treatment.</td>
<td>Challenges include financial sustainability of mental health staff; billing complexities.</td>
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treatment of emotional and behavioral problems. A recently prepared manual developed by Dennis Drotar and his colleagues provides specific guidance on developmental surveillance and screening and reviews a range of available instruments to help the practitioner select the appropriate tools to use.62

- Implementing multidisciplinary assessment protocols to screen for the most common conditions in children, such as autism spectrum disorders, depression, anxiety and attention deficit-hyperactivity disorder.

- Creating electronic medical records that enable all of the patient's providers access to patient information and clinical guidelines that prompt providers to conduct specific screening at appropriate developmental stages.

- Coordinating care across providers and systems via: a) case management, b) formal agreements that lay out referral and care arrangements across organizations, and c) preferred provider networks to increase access to mental health care in the community. This last strategy, use of preferred provider networks, is crucial for children and youth with severe emotional disturbance who are involved with multiple systems, such as juvenile justice, schools and child welfare.

Below we provide case examples of these various models. These examples have not been evaluated and are in varying stages of implementation so it is not possible to draw inferences regarding their impacts and generalizability.

**Approach 1: Consultation**

Given the shortage of child psychiatrists and other child mental health specialists in this country, many communities have no formal consultation infrastructure available to the pediatric community. For primary care providers working in rural and frontier communities, the nearest child psychiatrist may be several hours away. Two programs showcased here addressed this problem using very different consultative models, yet both achieved the goal of increasing access to mental health expertise for children who otherwise may have gone without appropriate care.

**Massachusetts Child Psychiatry Access Project (MCPAP).** This statewide project, which is available to all children, families and providers in the state, assists pediatric primary care providers in responding to mental health concerns among children. Six mental health teams, comprised of child psychiatrists, therapists and a care coordinator, provide phone consultation, diagnostic evaluation and care coordination to assist primary care providers in finding available mental health providers; they also provide local education and training. The program is well regarded by primary care providers, who indicated via a satisfaction survey that they are better able to meet the mental health needs of their patients and families. However, no formal evaluation has been conducted.

**Tuba City Indian Medical Center, Tuba City, Arizona.**

Due to shortages in child mental health providers, pediatricians at this remote location established a telemedicine link with the University of Arizona Department of Child and Adolescent Psychiatry. A psychologist provides cognitive-behavioral therapy via telepsychiatry to students in Tuba City high schools, with backup from the department director for complex cases. Medication is managed locally by a school-based health program, also affiliated with the University. Anecdotal reports indicate students are amenable to this approach to treatment and may find this remote approach less stigmatizing than speaking with a therapist in person. The six hours of telepsychiatry offered per week are insufficient to meet demand, however, so the program is exploring options for increasing capacity.

**Approach 2: Co-location of Services Within Pediatric Practice Settings**

Co-location of primary care providers and mental health specialists and/or care coordinators is an approach to integration that is being used most frequently by community health centers and larger practices, but is being adopted by some smaller practices as well. Simply sharing physical space can improve access to mental health care, but in some practices, co-located primary care and mental health providers may also share billing and other business arrangements, informally coordinate care, share treatment responsibilities, and/or collaborate on data and record-keeping.63
New York City Metropolitan Pediatric Clinics – Integrated Mental Health Primary Care Program, New York City, New York. This program co-locates psychiatrists and psychologists in pediatric clinics in Washington Heights, a primarily Dominican neighborhood in northern Manhattan. Three-quarters of the mental health staff are Spanish-speaking and provide assessment and treatment on site. Electronic medical records facilitate information sharing between primary care and mental health staff. The program is supported by Medicaid revenues to the clinics that provide these services.

Beaufort Pediatrics, Beaufort, South Carolina. Due to a local shortage of mental health professionals this 8-provider practice hired its own mental health professional, an MSW, to provide on-site counseling. The emphasis is on coordination, facilitated by using the same chart, informal consultations and quarterly case management reviews. Patients have preferred getting mental health services at the pediatric site and the availability of co-located mental health services has generally resulted in earlier intervention than might have taken place with a referral to another facility. In addition, the practice screens for maternal depression, family substance abuse, domestic violence and child developmental status. The practice provides free office space to the therapist and the mental health component of the practice is supported by enhanced Medicaid reimbursement due to the practice’s rural status, public payments for each child reviewed in the case management reviews, and by grant funding.

Community Health Center, Inc., Connecticut. As part of a pilot program for addressing maternal depression, this federally qualified health center added a care coordinator to oversee the administration and documentation of perinatal depression screening for new mothers throughout the first year after giving birth. Women screening positive for depression were referred for mental health care. A program evaluation that assessed completion of referrals found that women encountered several barriers to obtaining mental health care, including lack of time to go to therapy, transportation and lack of child care.64

Approach 3: Collaborative Care Models
Collaborative care builds on the medical home model by establishing partnerships between mental health and primary care providers who manage the treatment of child mental health problems in the primary care setting.65 The ways in which collaborative models are implemented may vary considerably, however they tend to share the following characteristics: formalized assessment, often involving a standardized assessment tool; cross-disciplinary case conferencing; co-management of care; psychiatric consultation; and some form of care coordination. In some instances, the practice supports cross-training in mental health issues.

Upper Valley Pediatrics, Bradford, Vermont. This comprehensive practice for children and youth with behavioral and developmental disorders responded to the dearth of local mental health providers and the increase in behavioral and learning problems seen among its patients by hiring nurse practitioners and mental health staff. Nursing staff have taken on the majority of the well child care, enabling the pediatrician to manage complex cognitive, emotional and behavioral problems. Mental health staff provide assessment, counseling and care coordination. The practice uses a “co-management” model in which the mental health providers present cases and a proposed model of care for review by the pediatrician. To attract mental health providers, the practice assumes responsibility for billing and licensing.

Child Health and Development Institute (CHDI), Connecticut. The CHDI addresses collaboration through the four primary care sites funded as part of the Connecticut Behavioral Health Services in Pediatric Primary Care initiative mentioned in the previous section for its efforts to increase Medicaid reimbursement to “Enhanced Care Clinics.” These clinics support collaborative relationships between primary care and behavioral health organizations. In order for mental health clinics to become sites, they had to increase access to mental health services for children and youth on Medicaid and integrate with primary care. CHDI is providing education for both primary care and mental health providers on screening and referral processes in order to enhance primary care providers’ capacity to provide counseling for behaviors within normal limits and facilitate ongoing collaboration. The evaluation plan, in its early stage, will include interviews with primary care practices in formal relationships and those who are not. The evaluators have completed
do so and are focusing on a limited set of conditions and lines of business.

Since plans represent many lines of business, each with different rules, it is often difficult to make across-the-board changes in policy or benefit structure. Consequently, most of the efforts being developed are targeted to specific products. Private sector efforts often target their larger employer enrollees, while some managed behavioral health companies are using their Medicaid carve-outs to develop efforts to support integration of mental health and primary care. To date, few if any efforts have been evaluated, thus limiting the evidence base for these interventions. This section discusses three types of current and potential efforts: internal health plan efforts, specific interventions and efforts that support providers, and interventions directly targeting children and their families. In many cases, the strategies being used combine all of these approaches.

**Internal Plan Efforts**

Internal plan efforts attempt to make primary care more effective in addressing mental health issues, to better coordinate pediatric and behavioral health within the plan, and in some cases “carve in” previously carved out behavioral health efforts. Plans report that they have established joint working groups with their pediatric and behavioral health specialists to consider the issues and requirements of providing mental health services in the pediatric setting from both perspectives and to identify potential support the plan can provide to assist with the integration process. In our discussions, plans indicated these committees are addressing policies and practices that allow for mental health services delivery by pediatric providers, including payment changes and development of pilot initiatives to test approaches to integration (Figure 3). Key areas identified in discussions included support for screening and changes in their credentialing processes. In some cases, plans indicated their reimbursement policies for mental health services were flexible but required case-by-case decisions. Others identified efforts related to the medical home and support for care coordination activities as a means of enhancing the ability of pediatric practices to address the mental health needs of their patients. Some plans are also involved in state and national efforts to address policy concerns related to the coverage of

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**Health Plan Roles in Addressing Children’s Mental Health Needs**

Beyond reimbursement, addressed earlier as a critical barrier to the integration of mental health in pediatric primary care, there are many other ways that health plans can and do support integration. The discussion below is drawn from the literature and a limited set of telephone interviews with health plans and managed behavioral health care companies. These contacts were based on recommendations from several people and the literature that suggested there might be activities to explore. Interviewees generally were the medical directors or other clinicians involved in the specific efforts and/or quality initiatives. The conversations with various mental health into primary care have mostly focused on adults. Of the plans contacted, few have addressed the pediatric population. Plans that have attempted to integrate mental health and primary care services for children are just beginning to
Strategies to Support the Integration of Mental Health into Pediatric Primary Care

Staff model health plans are clearly in a different position and can develop approaches to integration in their own practices. Several Kaiser Permanente plans provide examples of the approaches they are using for condition-specific care. As noted in Figures 4 and 5, approaches include collaborative and consultation models to assure appropriate services are being delivered.

Interventions to Support Primary Care Providers

Interventions to support primary care providers as they work to integrate mental health into their practices include quality initiatives, clinical guidelines, and support for use of screening and assessment tools. At the plan level, quality initiatives are being used particularly in the area of psychopharmacology. For example, Humana-owned Life Sync, a provider of integrated medical-behavioral care management services, conducts proactive reviews including pharmacy surveillance to address appropriate use of drugs. LifeSync provides prescribing guidance to the practices to support improved prescribing and monitoring of these patients. They are also incorporating HEDIS measures as part of their quality improvement efforts. These measures include items such as the

Figure 3. CentreCare Health System

The CentraCare Health System in St. Cloud, Minnesota is working with Blue Cross and Blue Shield of Minnesota and the Medical Health Foundation to integrate behavioral health into its primary care settings. To accomplish this, they are supporting mental health screenings at all well visits, crisis assessments conducted by mental health professionals at the primary care sites, consultations by child and adolescent psychiatrists for primary care providers, patient education, and provisions for emergency care. All of these services are reimbursed by the insurer. Treatment and management protocols for various conditions have been developed to further enhance the collaborative relationship.

Figure 4. Kaiser Permanente Colorado

Kaiser Permanente Colorado is treating patients with anorexia using an integrated approach where the primary care provider and behavioral therapist work together on an outpatient basis. First, using guidelines developed by Kaiser, a complete medical workup is performed, and a nutritionist develops a meal plan for the patient. Weekly monitoring is performed by the primary care provider, and referrals are made to the behavioral therapist if more intensive care is needed. Parents are highly involved in the care and are coached on how to interact with the child and address food and eating issues.

Figure 5. Kaiser Permanente of Northern California

Kaiser Permanente of Northern California has developed a comprehensive best practice guideline for ADHD. The guideline calls for targeted evaluation of children ages 6–12 for whom there are behavioral concerns. The process begins with the child’s parents and teachers completing the Achenbach System of Empirically Based Assessment (ASEBA), which screens and identifies those children at high risk of mental disorders.

The Kaiser pediatrician or nurse practitioner as well as the social worker/psychologist team then conduct child observations and evaluate the child for ADHD and co-morbidities. Finally, the team’s psychologist meets with the family to discuss the team’s observations and diagnosis. If the child has ADHD, the child is referred to the pediatrician to discuss medication management as part of the overall care plan, which may include an individual education plan and counseling by the Kaiser mental health provider.
percentage of children under the age of 18 who have a family session within the first 90 days of discharge from psychiatric care to assess the quality of care provided. Another example of a plan providing support on medication management is provided in Figure 6.

Plans can also support their providers by distributing or otherwise publicizing information that help the clinician to be as current as possible. This information includes guidelines, anticipatory guidance, directories and other tools. For example, HealthNow addresses adolescent issues by supporting screening for depression, suicide and bullying and providing anticipatory guidance to help the providers address these issues. In several states, Medicaid programs are requiring providers to screen pediatric patients or directing clinicians to use specific mental health screening tools. As a result of a lawsuit, Massachusetts requires that all pediatricians serving Medicaid beneficiaries use one of eight approved tools for mental health screening. Michigan has adopted the Child and Adolescent Needs and Strengths Assessment (CANS) for use among its children and youth on Medicaid. Other states may follow in Massachusetts’ footsteps and require screening among children on Medicaid or begin to mandate screening among children covered by private insurance. Health plans have a unique opportunity to support the use of screening tools among their providers prior to more formal action mandating screening in primary care.

Support to increase the skills of pediatric primary care providers includes various training and consultation services. For example, Passport Health Plan in Kentucky uses monthly roundtables to bring together all providers treating an individual with behavioral health conditions, including the primary care provider and the behavioral health specialist. While this approach is currently used for adults, such case conferencing is highly applicable to the pediatric population. Examples of this consultation approach have been discussed earlier in this paper. Figure 7 provides an additional example of how plans are enhancing provider skills.

Figure 6. HealthNow NY, Inc.

HealthNow NY, Inc., which operates BlueCross BlueShield of Western New York and BlueShield of Northeastern New York is addressing ADHD using a two-pronged approach with providers and patients’ families. After reviewing pharmacy claims to identify children prescribed drugs associated with ADHD, the plan sends a letter to the prescribing practitioner to provide them with the appropriate clinical guidelines regarding follow-up for children on these medications. The plan then uses their behavioral health vendor to send a letter to parents to advise appropriate follow-up care and to offer resources to help families address issues. The plan reviews available information on all aspects of ADHD for accuracy and selectively places that information on their member website.

Figure 7. Aetna’s Pediatric Behavioral Health Management Program

Aetna’s Pediatric Behavioral Health Management Program integrates behavioral health into primary care by enhancing providers’ skills to address patients’ needs and increasing access to psychiatric resources. The overall goal is to provide tools to support pediatricians in providing those mental health services they feel comfortable delivering to their patients. This effort is currently a pilot project specifically addressing mood and behavior problems, which are commonly seen in pediatric offices. Components of the pilot include: reimbursement for screening, telephonic consultations with a child and adolescent psychiatrist, psychiatric evaluation and assessment either in person or through video conferencing, and facilitated access to a psychiatrist. Further support is available for the provider through monthly case conferences. All telephonic or videoconferencing case management discussions are reimbursable and are of particular value to providers in remote locations where there may be limited access to behavioral health specialists. Implementation issues have included primarily logistical considerations, such as equipment and physical space in the five-state pilot. An evaluation of the pilot project will be completed.
Interventions Targeting Patients and Families

Specific interventions targeting patients and families are a growing area for health plans building upon their Employee Assistance Programs (EAPs) and websites for members. Mental health problems in adults and issues within their families often affect children and can be initially identified by EAPs who can provide opportunities for early intervention. EAPs may provide information and identify resources for the family. Plans are also addressing the need to provide information to families by expanding their websites and by more proactively reaching out to families based on identification of issues through claims reviews and follow-ups to hospitalizations (Figures 8 and 9). Notably, however, efforts targeting patients and families often do not include their primary care providers.

Strategies for Health Plans to Support Integration

As indicated through these examples, there are a number of activities that health plans can consider in supporting integration of mental health services into pediatric settings. Some of the key strategies plans may wish to consider:

- Internal review of the desirability and feasibility of integration
- Modification of plan policies, including reimbursement mechanisms, and other factors that may inhibit effective integration
- Pilot test and evaluate innovative approaches to integration
- Support state and national efforts to changing policies in support of integration
- Disseminate educational resources, guidelines and other tools to support primary care providers’ ability to address mental health concerns
- Conduct outreach to targeted patients and families identified through claims surveillance, EAPs or other means
- Implement quality improvement initiatives to ensure appropriate mental health care is provided in the pediatric practice, especially related to psychopharmacology
- Provide support for telephonic or in-person consultations with mental health professionals

Figure 9. Aetna Autism Resource Coordination Program

The Aetna Autism Resource Coordination Program is a pilot project with fifteen of its large national customers. Using claims data to identify new cases of autism spectrum disorder, the program includes proactive outreach to the families of affected children. The program uses specifically-trained resource coordinators who are licensed clinicians and are supervised by certified child and adolescent psychiatrists. The resource coordinators conduct outreach to families and help them to navigate the “complex insurance benefits, health, behavioral health, provider, education, legal, county and state systems.” Services include referrals, provision of information and linkages to support groups and advocacy organizations.

Figure 8. Life Sync

Acknowledging the important role of families in supporting and reinforcing behavioral interventions, Humana-owned Life Sync has adapted an evidence-based approach to post-hospitalization care for adolescents with eating disorders. Their approach is based on an evidence-based practice being implemented in England. Case management, patient education and support groups have been introduced to provide continuing support to the patient following discharge from the hospital. Further expansion of these efforts will include distributing tools to pediatricians, who see the majority of problems, and to EAPs that may identify problems at a very early stage, and conducting “reach outs” to families.
While examining and revising current reimbursement to provide the necessary financial incentives and support are essential, other efforts can also enhance integration efforts. Activities that provide resources for pediatric providers, including tools, information and consultation, as well as informational services directly supporting families, are among the efforts that need to be evaluated and considered for more expanded implementation.
SECTION IV: CONCLUSIONS

“With the appropriate training and collaborative relationships, primary care clinicians can and should deliver mental health services to children and adolescents in the primary care setting. The setting is ideal for initiating services to children with emerging developmental and behavioral problems and common mental health disorders...”

Overwhelming evidence points to the key role for pediatricians in promoting the mental health and well-being of the children and youth in their care. This evidence includes:

- the epidemiology of children’s mental health,
- the increasing knowledge regarding brain development,
- information on early risk and protective factors and the increased availability of reliable and valid screening and assessment tools, and
- evidence-based practices and the emerging evidence from the literature that prevention works.

There is also the promise of new guidance and technological advances that are beginning to make it more feasible to address mental health in the primary care setting, though more remains to be done. For example, there is ever-clearer guidance on what to screen for and when. Still in need of further development, however, are training materials to help pediatricians have difficult conversations with families about a child’s mental health, teach interviewing techniques, and guide brief counseling. The emergence of web-based tools supporting screening, scoring and resource identification is hopeful, but to date these tools have not been widely implemented. Electronic medical records, where they are being used, are assisting with multidisciplinary communication, decision support, clinical guidance and overall coordination of care, yet the use of electronic records and data sharing among primary care practices and mental health professionals is still very limited.

All of the advances to date, however, may not convince pediatricians who also provide primary care to children that they can “do it all.” In fact, they shouldn’t. They need ready support from psychiatry for medication management, from mental health specialists for children and youth with diagnosable disorders, and from child development specialists for problems in early childhood. These professionals can also be of great assistance around issues in the parenting relationship, such as attachment and parenting techniques, and often have the capacity to work in settings like the home, child care and schools.

We have discussed several strategies to incorporate mental health care into primary care with the medical home as an overarching framework for integration. Barriers that need to be overcome to implement these strategies include the shortage of mental health professionals, limited training to give primary care providers the skills needed to expand services, inadequate reimbursement for necessary services and to support care coordination mechanisms, fragmented systems of care, and both inadequate knowledge of the current evidence and the need for additional assessment of promising practices.

A number of actions, described below, can more systematically address the broad range of efforts necessary to increase the integration of mental health into pediatric primary care.

**Improved Reimbursement Policies and Practices**

Current reimbursement and coverage for mental health services are often impediments to integration. It is too early to know how the recent requirement for parity...
might change the benefits that are covered, expand the
definitions of providers who can deliver reimbursable
mental health services, or increase support for the
broad range of activities including phone contacts,
team meetings, follow-ups with schools and others
that are required to address children's mental health
needs. In addition, the current emphasis on the medical
home and improving payment by both the public and
private sector is a potential source of further support
for multidisciplinary approaches to delivering mental
health services in a more coordinated fashion.

Specific recommendations have been made by a
number of entities, including the recent AAP/AACAP
joint statement, the work of the National Center for
Children in Poverty and the recent SAMHSA report on
reimbursement of mental health services in primary
care that have been cited earlier. Most of the recom-
mendations focus on improvements in the Medicaid
program that serves many of the children in need of
service, but should also provide guidance for changes
by private payers.

Recommendations reflect the detailed exploration of
the current issues and include the following:

- Implementing strategies to ensure full utilization
  of Medicaid's EPSDT program to provide screening,
  assessment and treatment services;

- Changing policies related to same day billing
  prohibitions for physical health and mental health
  services and for care coordination to incent more
  collaborative arrangements;

- Supporting reimbursement and related policies to
  ensure screening and preventive services in primary
care settings are provided; and

- Assuring that policies are flexible and support the
  range of providers and the specific activities needed
  to deliver effective mental health services, including
care coordination, case conferencing and related
activities.

In addition to the changes in reimbursement policies,
support is also needed to improve primary care providers’
ability to navigate the payment systems and to identify
other potential resources that can support practice
changes. Finally, access to psychiatric consultative
services such as those identified in this paper need to be
expanded by both public and private payers.

Enhanced Primary Care Workforce Capacity
to Deliver Mental Health Services

A requisite to implementing integrated services in the
primary care setting is a workforce with the necessary
competencies and skills to provide services to a growing
number of children and to work collaboratively across
the physical and mental health arenas. In the mental
health arena the workforce is comprised of a range of
professions including child psychiatrists, psychologists,
clinical social workers, psychiatric nurses, licensed coun-
selors and therapists, case managers, mental health aides
and psychiatric technicians. Workforce data indicate a
critical shortage of child and adolescent psychiatrists,
with the 7,000 currently in practice representing only
about one-fifth of the projected need. Of those child
psychiatrists in practice, many do not work in the public
sector and/or accept only self-pay patients. Other
data indicate shortages in psychology and related fields
and a lack of training in general to address children with
serious mental disorders.

Primary care for children is generally provided by pedia-
tricians and family practitioners. In addition, nurses,
nurse practitioners and physician assistants often
provide physical health services to these populations.
Training requirements in behavioral and developmental
health vary across the professions as does the relative
emphasis in specific programs and the electives chosen
by the individual. There is a relatively greater emphasis
on developmental issues in pediatric training than in
family practice. Consideration of changes in pediatric
residency requirements include identifying ways to
address the changing morbidities of children and
adolescents, psychosocial issues, and the comprehen-
sive services needed for those with chronic physical,
mental, developmental and behavioral disorders. Some
family medicine programs provide major curricula on
mental health issues, and they all emphasize working
within the family context since they are likely to treat
the whole family. Subspecialties in both pediatrics and
family medicine support more in-depth training, and
continuing education offers numerous opportunities for
advanced training. The continuing education opportuni-
Enhancing the Evidence Base and Standardizing Care

Currently, there are a number of efforts to identify the evidence base for interventions and guidelines, including a recent IOM review of effective preventive practices, the Agency for Healthcare Research and Quality's synthesis efforts and others mentioned earlier. Various professional associations and payers are currently developing policies that will influence pediatric practice, but these efforts are unfolding in parallel, rather than in a coordinated manner. There is a need for collaboration and synthesis of all the information currently available, with the goal of developing common guidelines and standards for practice.

Federal and state agencies and professional associations are focusing on identifying, developing and disseminating tools that can be adopted by primary care practitioners. To expand on those efforts, there is a need to increase public and private sector support for innovation and testing of models to build a stronger evidence base. Health plans need to learn from their efforts for the adult population, which are further along and apply appropriate practices to children and youth. Federal agencies need to fund well-designed evaluations that assess the cost effectiveness and overall outcomes of interventions and disseminate best practices. Finally, support for expanded forums for dialogues among policymakers, payers, researchers and pediatric and mental health practitioners could significantly enhance efforts to increase the integration of mental health into pediatric primary care.

Addressing Other Areas to Support Integration

This paper has highlighted not only the strong role of the primary care setting but the need for increased emphasis on community-based approaches rather than inpatient settings. Addressing the current imbalance that reflects greater focus on inpatient treatment and the need for more comprehensive strategies that support the full array of prevention, intervention and treatment services will take more than changes in reimbursement policies. More systems-based approaches are needed to address the fragmentation among the various health, mental health, education, and social support services and systems. The pediatric medical home model provides a potential opportunity to address coordination for the individual's needs but is limited in the face of a fragmented delivery system. Attention at the local, state and federal levels is required to address these issues.

Other barriers to efforts to integrate mental health into pediatric primary care include differences in the perspectives of the health and mental health providers involved in potential integration efforts and impediments to information sharing, including both privacy and information systems issues. New and improved approaches to communication and coordination are required. The expansion of electronic medical records and other electronic tools that enhance communications and evidence-based decision-making can help address some of these barriers. The planned federal increase in investments in information technology will be an important resource for these efforts.
APPENDIX: SELECTED RESOURCES ON CHILDREN’S MENTAL HEALTH CARE

This listing provides additional information on screening instruments, federal initiatives, research and training centers, and other organizations with an interest in children’s mental health and/or the integration of mental health into primary care. The list is by no means exhaustive.

Screening and Assessment tools:

**General:**
Ages and Stages Questionnaire (ASQ): standardized developmental screener for children ages birth to 5.
www.agesandstages.com

www.pedstest.com

Pediatric Symptom Checklist (PSC): 35 item, parent-completed psychosocial screen. For youth ages 11 and up, there is a youth self-reporting tool (Y-PSC).

**Attention Deficit–Hyperactivity Disorder:**
Achenbach System of Empirically Based Assessment (ASEBA)/Research Center for Children, Youth and Families: parent and teacher-reported screening tools.
http://www.aseba.org/support/SAMPLES/samples.html

Vanderbilt Assessment Scales: parent report tool for ADHD assessment; part of a toolkit designed to help clinicians treat children with ADHD.
www.aap.org/pubserve/adhdtoolkit/dh3.htm

**Maternal Depression:**
Edinburgh Postnatal Depression Scale (EPDS)
www.fresno.ucsf.edu/pediatrics/downloads/edinburghscale.pdf

Center for Epidemiologic Studies Depression Scale (CES-D)
www.chcr.brown.edu/pcoc/cesdscale.pdf

**Adolescents:**
Teen Screen: a mental health check-up initiative designed to assist professionals to help adolescents with mental health concerns.
www.teenscreen.org

Guidelines for Adolescent Depression-Primary Care (GLAD-PC)
www.glad-pc.org

**Web-based screening:**
www.chadis.com

**Federal Agencies**
Agency for Healthcare Research and Quality (AHRQ): mission is to improve quality, safety, efficiency and effectiveness of health care.
www.ahrq.gov

Health Resources and Services Administration (HRSA): mission is to improve access to health care for people who are uninsured, isolated or medically vulnerable.
Supports Bright Futures.
www.hrsa.gov
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Substance Abuse and Mental Health Services Administration (SAMHSA): works to improve the quality and availability of substance abuse and mental health services.
www.samhsa.gov

National Institute of Mental Health (NIMH): supports research in mental health.
www.nimh.nih.gov

Centers for Disease Control and Prevention (CDC): agency dedicated to the nation’s public health; conducts national household surveys, supports early childhood initiatives and community prevention services.
www.cdc.gov

Federal Initiatives in Mental Health and Primary Care

SAMHSA
- Comprehensive Community Mental Health Services for Children and Their Families program: provides grants to states, communities, and American Indian tribal communities to improve and expand their mental health service delivery systems to better meet the needs of children and families. Goals are to develop and expand an array of family- and youth-driven services in an integrated, community-based and culturally competent manner.

- Starting Early Starting Smart program: a collaborative effort with the Annie E. Casey Foundation to test the effectiveness of integrating mental health and substance abuse prevention and treatment services with primary care and early childhood settings.

- Project Launch supports integrated efforts to address all aspects of child development across a range of child-serving settings for children ages birth through 8.

HRSA, Maternal and Child Health Bureau
- The Early Childhood Comprehensive Systems Initiative works at the state level to develop comprehensive and integrated systems for children by fostering a collaboration among health care, early education, social and emotional health, parent education and family support services.

- The Integrated Health and Behavioral Health Care for Children, Adolescents and Their Families program provides grants to develop models that integrate primary care, substance abuse treatment and mental health services.

Foundations

The Commonwealth Fund: promotes a high performing health care system; supports research and initiatives that support young children’s healthy mental health development.
www.commonwealthfund.org

Hogg Foundation for Mental Health; primary strategic focus is integrated physical and mental health care.
www.hogg.utexas.edu

Grantmakers in Health: publications on mental health include papers on maternal depression and the prevention and treatment of children’s mental health.
www.gih.org

The Robert Wood Johnson Foundation: mission is to improve the health and health care of all Americans. Supports numerous research and direct service efforts in children’s mental health and health care.
www.rwjf.org

Other Organizations and Resources Centers

American Academy of Pediatrics: membership organization representing 60,000 pediatricians, pediatric medical sub-specialists and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents and young adults.
www.aap.org/mentalhealth

Bright Futures: a national health promotion and disease prevention initiative that addresses children’s health needs in the context of family and community.
www.brightfutures.aap.org
Child Health and Development Institute of Connecticut, Inc; supports public-private initiatives to improve health and mental health care for children.
www.chdi.org

National Institute for Children’s Health Care (NICHQ): mission is to improve children's health care by improving systems and accelerating adoption of best practices.
www.nichq.org

National Business Group on Health: membership organization representing large employers’ perspective on health issues. Publishes reports on the role of employee assistance programs in children’s mental health.
www.businessgrouphealth.org

National Center on Children in Poverty at Columbia University: supports research on vulnerable children and families; recent publications include reports on mental health financing and policy.
www.nccp.org

National Technical Assistance Center for Children's Mental Health at Georgetown University: a program of the Georgetown University Center for Child and Human Development, the Center provides training and technical assistance on children’s mental health and systems of care.
http://gucchd.georgetown.edu

National Center for Cultural Competence: provides technical assistance to states and organizations on strategies for implementing culturally and linguistically competent service systems.
www.georgetown.edu/research/gucchd/nccc

Research and Training Center for Children’s Mental Health: located at the University of South Florida, the Center addresses the need for improved services and outcomes for children with severe emotional disturbance and their families.
http://rtckids.fmhi.usf.edu

National Child Traumatic Stress Network: mission is to improve the standard of care for traumatized children and their families.
www.nctsn.org

http://www.med.uvm.edu/vchip/


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