# LDI Issue Brief

Volume 5, Number 7 April 2000

Leonard Davis Institute of Health Economics

### Annie G. Steinberg, MD

LDI Senior Fellow, Assistant Professor of Psychiatry and Pediatrics, Co-Director, Center for Children's Policy, Practice and Research University of Pennsylvania

### Anne Gadomski, MD, MPH

Research Scientist, Attending Pediatrician, Bassett Research Institute

### Michele D. Wilson, MD

Department of Pediatrics Children's Hospital of Philadelphia

## Children's Mental Health: Recommendations for Research, Practice and Policy

Editor's Note: A recent study documented a large increase in prescriptions of stimulants and antidepressants among preschoolers, and has prompted public and professional concern about the effects of mood-altering drugs on young children. In response, the White House announced a broad initiative on children's mental health, including more government money for research, new labels on drugs for pediatric use, educational materials for parents, and a fall White House conference. To place these events in their larger context, this Issue Brief summarizes the findings of the Children's Mental Health Alliance Project, which conducted a multidisciplinary consensus conference in November 1998 followed by a year-long dialogue with clinicians, researchers, and families.

### The shifting landscape

The landscape for children's mental health services has changed dramatically in the past decade, due to the confluence of several factors.

- The "decade of the brain" has witnessed the increased use of psychotropic medications, and further development of biological psychiatry. Advances in psychopharmacology have led to many breakthrough treatments, particularly in mood disorders among adults. Psychotropic medications are now being used in children as well, although extrapolation of safety and efficacy data from adults is not always valid.
- The emergence of managed care has shifted children's mental health care from specialists to primary care providers. Community surveys indicate that in some areas, two-thirds of children with psychiatric disorders do not receive specialist care.
- Epidemiological research has documented the under-recognition of mental health problems, and resulting unmet needs, of children in primary care. Roughly one in five children attending pediatric practices has significant mental health problems. It is estimated that 60% of them do not receive the services that they need.

### Psychotropic drug use in children grows dramatically

Despite a lack of data on the outcomes of treatment with many psychotropic medicines among children, their use in children is rising. The most common psychotropic medications prescribed are stimulants to treat attention deficit hyperactivity disorder (ADHD), and antidepressants.

- In the last 15 years, the 5-through-14-year-old age group has experienced a great increase in stimulant treatment for ADHD, and the 15-through-19-year-old age group has had sizable increases in the use of antidepressants.
- Public concern has focused on the possibility that psychotropic drugs are being overutilized in children. However, the level of psychotropic drug use may reflect the

actual prevalence of childhood mental disorders. According to the 1999 Surgeon General's Report on Mental Health, about 6 to 9 million children and adolescents have "serious emotional disturbances", accounting for 9% to 13% of all children. Alternately, the increased utilization could reflect a societal shift toward including learning and developmental problems within the mental health sphere.

- A recent study in the Journal of the American Medical Association found that the number of preschoolers taking stimulants more than doubled between 1991 and 1995, and the number of children on antidepressants increased 200%. Overall, the results suggest that 1% to 1.5% of children ages 2 to 4 years old may be taking stimulants, antidepressants, or antipsychotic medications.
- Among children, 75% to 80% of psychotropic medication is prescribed off-label, meaning that its use is not officially approved by the Food and Drug Administration for this age group. For example, Ritalin, a stimulant used to treat ADHD, has not been tested or approved for use in children below age six.
- Practice patterns have outpaced the research on the effectiveness of different treatment options. There is good evidence that sustained treatment with medication provides continued benefit for children over six with ADHD; there is far less evidence supporting the use of medication to treat children with anxiety or mood disorders.

# Managed care affects who delivers mental health services to children

With the proliferation of managed care organizations, primary care providers often function as gatekeepers—sometimes with disincentives to refer to mental health specialists. However, the overall impact of managed care on access to and quality of children's mental health services is not clear.

- Research on the impact of managed care is hampered by the rapid evolution of managed care, the turnover of managed care organizations, and the lack of a consistent database that would allow tracking of outcomes.
- Mental health care carve-outs are rapidly expanding within managed care. In a typical
  carve-out program, an independent company contracts with the managed care plan to
  provide mental health services, usually on a capitated basis. Advantages of this
  approach are that providers can focus on specific conditions and offer competitive
  capitated rates. The disadvantages of carve-outs are that they allow less integration
  with primary care, and exacerbate the separation between physical and mental health.
  Carve-outs challenge the fundamental collaborative model of care for children and
  families.
- Emerging studies on mental health carve-outs (in adults) document 30% to 40% cost reductions, although apparent reductions might instead represent cost shifting to other entities (such as public agencies, primary care providers or schools). Carve-outs generally save money by reducing hospitalizations, shifting inpatient to outpatient care, and replacing psychiatrists with masters-level therapists. However, the impact on quality of care is unknown.

Primary care providers need additional resources to identify and address children's mental health needs

The current "scorecard" on mental health screening of children in primary care is not optimistic. The constraints of primary care practice (13 minutes allotted per visit on average), and the limited availability of mental health specialists, make it difficult for pediatricians and family practitioners to implement systematic screening procedures or diagnostic assessments.

• Valid screening tools exist (for example, the Pediatric Symptom Checklist), but primary care providers often lack the information or resources necessary to act on the

results. Studies show that even when psychosocial issues are elicited as part of well-child visits, primary care providers respond with information, reassurance, guidance or referral less than half the time.

- Many primary care providers express concern about making the right diagnosis, choosing the right treatment modality, and picking the right medication when facing mental health problems in children. To address identified mental health problems, primary care providers need readily available information regarding next steps, including accessible mental health referral sources and direct consultation with specialists.
- Outcomes data are needed to develop an evidence-based approach to what works in children's mental health service delivery. Such studies would help redefine what constitutes "best practices" in the primary care/specialist relationship as it pertains to children's mental health, rather than continue to have payers and mental health professional shortages determine the frequency, level, modality and provider of mental health services.

### A system of care model holds promise for children's mental health

Many experts recognize the need for a system of care that integrates mental health services with other health and social services. A systems approach can be seen as a "carve-in" to meet the needs of children and families.

- "System of Care" studies show that integrated systems provide better access to treatment, greater continuity of care, and higher client satisfaction, but at higher cost and with questionable improvements in outcomes. Evaluating the effectiveness of such systems poses a complex and vexing challenge because it involves identifying hard-to-measure outcomes from multiple domains.
- School-based centers provide a unique opportunity to provide access to mental health care to children, but programs have been implemented in a piecemeal fashion.
   A comprehensive approach is needed to integrate these programs, and place them within a continuum of interventions addressing behavioral, learning, and emotional problems that affect development and learning.

### Setting a research agenda

An evidence-based approach to children's mental health problems is needed and must address the complexity of working with several levels of primary care providers and specialists. Practice guidelines should be developed to guide the referral process and reduce variations in care.

- The limited evidence about the efficacy of psychotropic drugs for children is hindering development of an evidence-based approach to care. Several research initiatives are underway, but other studies are needed, especially addressing the efficacy of combinations of drugs and combinations of drugs and psychotherapy.
- There is limited evidence about the effectiveness of primary versus specialty care. Studying "usual care" in real-life settings is essential in translating research into practice. Measures of function, outcome, quality, readiness for change, parental and family function, and systems coordination need to be developed to fully capture the complexity of the factors that affect children's mental health.
- Research on the cost-effectiveness of children's mental health programs in primary
  care is underdeveloped. Studies are needed to analyze costs in terms of long-term
  outcomes, impact on other systems (juvenile justice, schools, etc.) and effects on other
  populations. Long-term studies would clarify the extent to which early mental health
  interventions prevent or reduce adult mental health problems and disability.

### **POLICY IMPLICATIONS**

The Children's Mental Health Alliance Project developed recommendations for policymakers to overcome the increasing fragmentation of the health care system and to address the burden of illness arising from unrecognized or untreated mental health problems in children.

- Universal coverage and comprehensive mental health benefits are a necessary, though
  not sufficient, condition for receiving appropriate treatment. Mental health services
  for children and adolescents should be integrated into or closely coordinated with
  overall health care of children and families.
- Managed care organizations, especially those serving Medicaid populations, should be required to demonstrate coordination and a system of care. Funding streams for children's mental health issues should be united and tied to a consolidated, rather than categorical, system of care.
- Primary care providers need increased training in the diagnosis and management of
  common mental health problems and appropriate screening tools that fit into the
  demands of busy office practices. To integrate mental health services into primary
  care, guidelines should be developed that clarify the roles of primary and specialty
  care providers, and guide decisions on when to refer.
- A uniform approach should be taken to track quality indicators in children's mental
  health care. For example, potential consumers and managers should have access to
  information regarding how a health plan identifies children with mental health needs,
  the average number of visits for a mental health problem, and the percentage of
  children treated pharmacologically for a mental health concern.

This Issue Brief is based on the following monograph: A.G. Steinberg, A. Gadomski, M.D. Wilson. Children's Mental Health: The Changing Interface Between Primary and Specialty Care. Report of the Children's Mental Health Alliance Project, Philadelphia, PA 1999. [A limited number of copies are available and can be obtained at no cost by contacting Annie Steinberg, MD, Children's Seashore House of the Children's Hospital of Philadelphia, 3405 Civic Center Boulevard, Philadelphia, PA 19104.]

Published by the Leonard Davis Institute of Health Economics, University of Pennsylvania, 3641 Locust Walk, Philadelphia, PA 19104-6218, 215-898-5611.

Janet Weiner, MPH, Associate Director for Health Policy, Editor David A. Asch, MD, MBA, Executive Director Visit us on the web at www.upenn.edu/ldi/

Issue Briefs synthesize the results of research by LDI's Senior Fellows, a consortium of Penn scholars studying medical, economic, and social and ethical issues that influence how health care is organized, financed, managed, and delivered in the United States and internationally. The LDI is a cooperative venture among Penn schools including Dental Medicine, Medicine, Nursing and Wharton. For additional information on this or other Issue Briefs, contact Janet Weiner (e-mail: weinerja@mail.med.upenn.edu; 215-573-9374).

3641 Locust Walk
Philadelphia, PA 19104-6218
215.898.5611

\$\int\_{ax} \text{215.898.0229}
\$\frac{1}{2} \text{200} \text{2

Published by the Leonard Davis Institute of Health Economics University of Pennsylvania





Permit No. 2563 Philadelphia, PA 19104

**GIA** 9

Nonprofit Organization V.S. Postage