### Review of Studies of Children With ADHD Shows Little Benefit From Behavior Therapy as Adjunct to Stimulants

Research on treatment of children with attention-deficit hyperactivity disorder (ADHD) indicates that intensive behavior therapy, comprising child, family, and school-based interventions, adds little to the effects of long-term therapy with stimulants, according to a comprehensive review of treatment of ADHD released by the federal Agency for Healthcare Research and Quality (AHRQ).

The review also found that although ADHD was previously thought to remit before or during adolescence, more than 70 percent of hyperactive children continue to meet criteria for ADHD as adolescents. Up to 65 percent meet ADHD criteria as adults.

Conducted by researchers at Mc-Master University in Hamilton, Ontario, the review was commissioned by AHRQ to examine the existing scientific evidence on treatment of ADHD, emphasizing the implications for clinical practice and the opportunities for future research. AHRQ is charged with developing evidence-based reports through its 12 practice centers and disseminating evidence-based guidelines through its National Guidelines Clearinghouse.

In the review, 2,405 citations related to ADHD were identified in a search of computer databases of the scientific literature and other sources dating as far back as 1966. Ninety-two reports, describing 78 different studies, met all the inclusion criteria.

The review drew the following conclusions in seven areas of interest identified by the investigators.

**Drug versus drug comparisons.** The limited evidence available from studies comparing different stimulants suggests that there are few, if any, short-term differences in effectiveness among methylphenidate, dextroamphetamine, and pemoline.

**Drug versus nondrug comparisons.** The study results consistently indicate that stimulants are more effective than nonpharmacological interventions in direct comparisons.

Combination therapies. Evi-

dence is lacking to support the superiority of combination therapy over stimulant alone or the superiority of combination therapy over nondrug intervention alone. A recent large trial found that combined treatment offers modest additional benefits over singlecomponent treatments for areas of function not related to ADHD.

Tricyclic antidepressants versus placebo. The studies of desipramine suggest that it is more effective than placebo, despite the studies' heterogeneous designs, small sample sizes, and variable quality. Studies evaluating imipramine show inconsistent results.

Long-term therapy. All but one of the studies were restricted to schoolage children. Few studies followed children for a period equivalent to the time they typically remain on ADHD treatments. Few also reported side effects or used outcome measures specific to home or school. This group of studies did show a trend toward general improvement over time regardless of treatment and support the need for long-term, placebo-controlled studies.

Methylphenidate appears to reduce behavioral disturbance in children with ADHD as long as it is taken. However, information is lacking on the reasons so many children discontinue medication. The studies provide little evidence for improvement in academic performance with stimulants, even though methylphenidate treatment appears to produce consistent improvement in behavior.

Treatment of ADHD in adults. The few studies evaluating methylphenidate versus placebo show contradictory results. The most methodologically rigorous study suggests that methylphenidate may be effective for the treatment of ADHD in adults. Antidepressants may also be effective. Studies comparing pemoline, nicotine, or phenylalanine with placebo did not produce evidence supporting use of these drugs. No studies were designed to determine the proportion of adults with ADHD who will use and benefit from other interventions.

Adverse effects. Many of the side effects associated with use of stimulants appear to be relatively mild, of short duration, and responsive to adjustments in dosing or timing. However, data were inadequate on the long-term effects and severity of the adverse effects of most interventions.

The report, Treatment of Attention-Deficit/Hyperactivity Disorder, is available on line at www.ahrq.gov. Print copies are available from the AHRQ Publications Clearinghouse, P.O. Box 8547, Silver Spring, Maryland; phone, 800-358-9295. An accompanying report, Diagnosis of Attention Deficit-Hyperactivity Disorder, examines the accuracy of both ADHD-specific and general behavioral rating scales as tools to identify children with ADHD. It reviews evidence of the value of other medical screening tests for children who may have ADHD.

## Integration of Health Care Services More Likely as Costs Rise, Report Says

The rising costs of health care after several years of low increases or no increases are driving more organizations to consider integration of behavioral health care services in primary medical settings, according to a report from Milliman & Robertson, a health care consulting firm.

The report, one of a series of research reports issued by the firm, concludes that integration may lead to lower costs if services are delivered in a managed care setting and also may provide better care for patients.

Currently most behavioral health care in managed care plans is provided through carve-out arrangements that separate the delivery of primary medical and managed behavioral health care, a structure that makes integration of services extremely challenging, if not impossible, the report states.

Health care costs were expected to increase by an estimated 7 percent or more in 1999 and to rise perhaps even more this year, according to the report. The cost of managed care plans may

grow as fast as or faster than the cost of traditional indemnity medical plans as insurers try to recover from underpriced plans in recent years.

Employers drive what happens in health care through purchasing decisions, the report points out. They are beginning to demand that health care providers focus on maintaining the health of employees rather than on treating injury and disease. The high prevalence of somatization in primary care settings is reflected by data showing that 60 to 70 percent of all medical visits have no medical or biological diagnosis that can be confirmed and that an estimated 25 percents of patients seeking primary care have one or more diagnosable mental illnesses.

The report says that such data provide evidence that integration of behavioral health care services in primary care settings may have great potential for reaching and treating more patients with behavioral disorders, providing more appropriate health care services for the underlying illness or disorder, and increasing awareness of behavioral disorders.

The report notes that various studies have found that effective behavioral health care offsets the cost of medical care. In one integrated program for a large employer, reductions in health care utilization rates could be translated to a reduction of \$3.45 per member per month in costs of medical and surgical services, an amount larger than the total expected cost of \$2 to \$3 per member per month for the typical behavioral health care carve-out plan.

However, medical cost offsets are not guaranteed by integration of services, the report declares. The impact of integrated services can vary dramatically, but when increased mental health treatments are targeted, focused, and brief, and delivered in a managed care setting, costs have been reduced.

The report, entitled Research Report: Financial, Risk, and Structural Issues Related to the Integration of Behavioral Healthcare in Primary Care Settings Under Managed Care by Stephen P. Melek, F.S.A., M.A.A.A., is available on the Internet at www. milliman.com/milliman/publications.

# Survey Shows More Than a Third of High School Students Currently Use Tobacco

Almost 35 percent of high school students in grades nine through 12 have used tobacco within the last 30 days, according to the National Youth Tobacco Survey. Twenty-eight percent of the students used cigarettes, the most popular tobacco product.

The survey also found that 12 percent of middle-school students in grades six to eight were current tobacco users. Nine percent used cigarettes.

Cigarette smoking was considerably more prevalent among white high school students (33 percent) than among black students (16 percent) and somewhat more prevalent than among Hispanic students (26 percent). However, no such differences were found among middle-school students. Current cigarette use was reported by 9 percent of black students, 9 percent of whites, and 11 percent of Hispanics.

The survey, conducted during the fall of 1999, was the first to measure the prevalence of current tobacco use among a nationally representative sample of middle-school students. Tobacco use by high school students has previously been measured in other national surveys.

A summary of the survey findings is available on the National Clearinghouse for Alcohol and Drug Information Web site at www. health.org/pubs/qdocs/tobacco/youth.htm.

## Study of Medicaid Drug Formularies in Nine States Finds Newer Antipsychotics More Accessible Than Other Drugs

A study of Medicaid drug formularies in nine states indicates that Medicaid recipients have better access to the newer, higher-cost atypical antipsychotic drugs than they do to higher-cost drugs for physical health conditions. However, the findings suggest that continuing increases in the cost of drugs may lead to restricted access to the newer drugs through such mechanisms as greater use of closed formularies, use of pharmacy benefit managers, or requirements for prior approval for a prescribed drug or therapeutic failure on another drug.

The study, conducted by the Bazelon Center for Mental Health Law in Washington, D.C., and funded by the National Institute of Mental Health, was prompted by concerns about the need for appropriate and timely access to the newer medications for the Medicaid population. The new drugs, which have been shown to achieve better outcomes with fewer side ef-

fects for many patients, in general cost two to three times more than the older antipsychotic drugs.

The study was based on information provided by the Medicaid or pharmacy director in each of the nine states and on data from other sources such as the Health Care Financing Administration. It compared the availability of six pharmaceuticals—four atypical antipsychotics and two drugs for physical health conditions—to Medicaid recipients in Connecticut, Florida, Hawaii, Illinois, Iowa, New Mexico, Texas, Utah, and Wyoming.

The states were selected because of their differing service delivery systems. Illinois and Wyoming were chosen because of their fee-for-service arrangements, which serve most beneficiaries; Hawaii, Iowa, Texas, and Utah because of their contracts with mental health carve-out companies; and Florida, Connecticut, and New Mexico because they contract with integrated physical and mental health managed care entities.

The drugs studied were chosen because of their higher price and improved outcomes compared with older medications. They were the antipsychotics clozapine, Zyprexa, Seroquel, and Risperdal; Azactam, an antibiotic; and Prilosec, prescribed for ulcers and gastroesophageal reflux disease. Clozapine, marketed as Clozaril, was the only drug with a generic alternative.

Among the nine states, Connecticut had the highest 1998 drug payments per recipient, \$1,383, as well as the highest percentage of pharmacy budget expenditures for psychotherapeutic drugs, 22 percent. Florida, which had the lowest percentage of pharmacy budget expenditures for psychotherapeutics, 12 percent, reported payments per recipient of \$754. The two states that allow managed care organizations to develop their own closed formularies-New Mexico and Hawaii—did not present a consistent pattern of drug payments per recipient; Hawaii had the second highest level of payments per recipient, \$905, and New Mexico the lowest, \$343.

Five of the states—Illinois, Texas, Utah, Florida, and Wyoming—either restricted the number of refills per month or the number of prescriptions for different drugs per month that could be filled at one time.

In both the Medicaid carve-out programs and integrated health care plans, physical health medications were more likely to require prior approval than were atypical antipsychotics. Two of the programs required prior approval for Prilosec, and one required prior approval for Azactam.

The study report said that concerns about access to prescription drugs in managed care programs has led 29 states to pass laws requiring managed care organizations to disclose the drug formulary and the procedures for obtaining nonformulary drugs. Five of the laws were passed in 1999. Twenty-six states were considering enacting similar statutes or amending current laws to require such disclosure.

The report is available on the Bazelon Center Web site at www. bazelon.org.

#### **NEWS BRIEFS**

**NAMI voting drive:** The National Alliance for the Mentally Ill (NAMI) has launched a national nonpartisan campaign for voter registration and education targeted to people with severe mental illness, their families, and friends. The goal of the campaign is to build support for fundamental change in the nation's mental health care system. Although NAMI will pursue its campaign in states with presidential primaries, the real focus will be on the general election in November and on building movements at the state and local levels to advance adoption of its Omnibus Mental Illness Recovery Act. Key elements of the act include consumer and family participation in planning services, equitable healthcare coverage, and access to newer medications in health plans.

Grants to expand drug abuse treatment capacity: The Center for Substance Abuse Treatment (CSAT) has announced up to \$30 million in grants to expand treatment capacity for substance abuse in local communities with serious, emerging drug problems or communities that propose innovative solutions to unmet needs. The grants, part of CSAT's Targeted Treatment Capacity Expansion program, will provide funding to cities, towns, counties, and Indian tribes and tribal organizations. Grants are expected to range from \$100,000 to a maximum of \$500,000 for most programs. Applications are available on the Internet at www.samhsa.gov or by calling 800-729-6682.

#### PEOPLE & PLACES

Appointments: *Gregory Fricchione*, *M.D.*, has joined the staff of the Carter Center in Atlanta as director of its mental health program. He formerly was associate professor of psychiatry at Harvard Medical School and director of the medical psychiatry service at Brigham and Women's Hospital in Boston.

Arthur T. Meyerson, M.D., has been appointed medical director of the Redtop Company, founded in 1996 to develop electronic tools, software, Internet products, and related expertise for mental health professionals. Dr. Meyerson formerly was vice-chairman of psychiatry and clinical director at the University of Medicine and Dentistry of New Jersey in Newark.

Marianne N. Klugheit, M.D., was recently named associate chairman of the department of psychiatry at Albert Einstein Medical Center in Philadelphia. She will also continue to serve as director of the division of community psychiatry and medical director of Northwestern Human Services of Philadelphia.

Award: Douglas H. Hughes, M.D., was presented with the fifth annual Janssen Emergency Psychiatry Award from the American Association for Emergency Psychiatry during the association's annual meeting last fall in New Orleans. Dr. Hughes is associate professor of psychiatry at Boston University School of Medicine, associate chief of psychiatry at the Boston Veterans Affairs Medical Center, and editor of Psychiatric Services' emergency psychiatry column.

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