

# Helping Youths With Severe Emotional Disturbances at Risk of Institutionalization

**Intensive In-Home Child and Adolescent Psychiatric Service,  
Child Study Center, Yale University, New Haven, Connecticut**

Among the most pressing problems affecting the field of child and adolescent psychiatry today are those that have resulted from chronic, potentially malignant interactions between youths and their social environment. As has been well documented by numerous studies in developmental psychopathology, various types of psychosocial adversity adversely affect a child's development and place the child at increased risk of requiring institutional treatments.

Although institutionally based treatments can be helpful to some children, they carry significant risk of the deleterious effects of institutionalization and usually do not ameliorate the psychosocial adversity to which the children will return upon discharge.

Risk factors for psychosocial adversity are additive in their deleterious effect and tend to aggregate. These risk factors include poverty, racism, parental mental illness and substance abuse, domestic violence, abuse and neglect, inadequate housing, dangerous neighborhoods, poor schools, and lack of recreational and vocational resources. In order to be helpful to a youth with serious emotional disturbance, an intervention must engage all of the family members, as well as appropriate service providers, to mitigate and reverse these risk factors while simultaneously providing the youth with effective mental health services.

The Intensive In-Home Child and Adolescent Psychiatric Service (IICAPS)—a home-based, family-focused treatment program for youths with severe emotional disturbances who are at risk of institutionalization—recognizes the influence of family members and requires their involvement in treating these youths. The

program combines elements of a medicalized treatment with system-of-care principles that place a high value on authentic parent involvement and attention to youth and family strengths.

The program was developed in 1996 by three faculty members of the Child Study Center at Yale University, Joseph Woolston, M.D., Steven Berkowitz, M.D., and Jean Adnopo, M.P.H. They worked together to develop the program after seeing the negative effects that managed Medicaid and mental health carve-out companies were having on the mental health treatment of Connecticut's youths. In an effort to maintain profits, carved-out mental health plans in Connecticut had drastically reduced inpatient psychiatric admissions and services for patients with severe illness. For example, Woolston saw that the length of stay for inpatient hospitalization decreased from more than 45 days to less than seven days, without any increase in outpatient services. Also, few choices for intensive outpatient treatment programs were available for youths who were severely ill and without financial resources.

The intervention began as a single-site program with fee-for-service contracts with managed Medicaid health maintenance organizations in Connecticut. After several years of successful operation, the state agency responsible for children's mental health, Department of Children and Families, partnered with the developers to create a statewide network of IICAPS providers. This network of providers was initially funded by state service grants. In 2006 the developers, the Department of Children and Families, and the agency for managing Medicaid payments (Department of Social Services)

changed the funding to Medicaid-funded fee for service. This process included developing two new Medicaid codes that supported the home-based, team aspects of the intervention.

The IICAPS is an effective treatment option for youths in need. It minimizes the need for inpatient hospitalization by providing appropriate community treatment in a highly structured and home-based psychiatric intervention program. The success of the program can be seen by its growth—the IICAPS started with one site and has grown to 14 sites throughout Connecticut—and by its positive outcomes—increases in functioning, as well as decreases in the severity of behavior problems, inpatient admissions, emergency department visits, and residential treatment admissions.

In recognition of the proven success this innovative treatment program has had in helping youths with severe emotional disturbances who are at risk of institutionalization, IICAPS has been awarded APA's Gold Achievement Award for 2007 in the category of academically or institutionally based programs. The winning program in the category of community-based programs is described on page 1366. Each Gold Award winner will receive a plaque and a \$7,500 prize, made possible by a grant from Pfizer, Inc., on October 11 at the Institute on Psychiatric Services in New Orleans.

## The intervention

The youths treated by IICAPS have psychiatric disturbances and often live in ongoing conditions of psychosocial adversity that compound any psychopathology present, inhibit effective treatment, and are contributing causes to the psychiatric disturbance. The

psychology of motivation, action, and problem solving guides the treatment process. The involvement of family members, which is essential in order for treatment to progress, is enhanced by ongoing engagement and effective problem solving.

IICAPS treatment protocols are based on an appreciation of the powerful effects on child functioning that emerge from the interactions between the youth and his or her social environment. The treatment is guided by principles, tools, and measures that seek to improve the fit between the youth and the world in which he or she lives by optimizing the youth's development and maintaining safety in the home and community. Family members are considered equal partners in all aspects of the treatment. They are assisted by the treatment team in identifying the main problem that can result in the removal of the child to a more restrictive placement, co-constructing the treatment plan, setting goals and action steps toward the goals, and establishing the pace of the treatment process. IICAPS interventions focus upon four critical domains: child, family, school and environment, and other systems.

Children and adolescents appropriate for IICAPS services are those who are at risk of requiring institution-based care, those who are unable to be discharged from such care without intensive treatment and support, or those who are sufficiently unresponsive to outpatient services (that is, their basic developmental accomplishments are compromised). Treatment is provided by teams consisting of a licensed or license-eligible mental health professional (social worker, psychologist, or nurse) and a bachelor's-level mental health counselor. The teams provide assessment and evaluation, direct psychiatric treatment to the identified youth, parental guidance and parent skill building, intensive care management services to all family members, and when needed, mobile crisis services, which are available 24 hours a day, seven days a week. Team members, who carry between eight and nine cases at any given time, together provide a minimum of five hours of service a family a week. The average length of treatment is six months.

Senior mental health professionals

provide weekly supervision for all teams. In addition, each case is presented on a three-week rotation at weekly rounds that are co-led by the program coordinator and a child and adolescent psychiatrist. Although the treatment approach is collaborative and intended to maintain and enhance ongoing treatment relationships with existing outpatient service providers, the child and adolescent psychiatrist provides direct psychiatric assessment and medication management as needed. Additional psychiatric consultation is available to each IICAPS team 24 hours a day, seven days a week.

### **Expanding the program**

In 2000 Connecticut's Department of Children and Families entered into the first of several contracts designed to support the delivery of IICAPS services to youths with severe emotional disturbances. In 2002 the Department of Children and Families selected the IICAPS as a promising mental health practice and became fiscally and programmatically committed to its replication throughout the state as part of an innovative children's mental health reform initiative. Simultaneously, a second state agency, the Court Support Services Division of the Superior Court for Juvenile Matters, selected the IICAPS as a model of intervention for children and adolescents who were on probation and had coexisting mental health disorders. Between 2002 and 2005 the Department of Children and Families, in collaboration with the IICAPS developers, selected 13 additional agencies from a group of interested applicants to become sites that would replicate the IICAPS model. As members of the statewide IICAPS network, each of these sites developed contracts with the Department of Children and Families to supplement whatever fee-for-service funds the programs might raise during the start-up process. With the support of the Department of Children and Families, the Child Study Center at Yale University created IICAPS Services, a training and data collection arm of the program, to support the emerging statewide network of IICAPS providers.

A training protocol consisting of 12 hours of training for potential IICAPS

providers was developed and implemented by IICAPS Services. All program administrators, supervisors, and individuals hired as team members are required to attend this training. Other activities of IICAPS Services include training for medical directors, monthly telephone consultations with IICAPS program supervisors, and quarterly network booster training. Also held are separate quarterly meetings for IICAPS leadership and IICAPS staff, which include didactic presentations and allow staff the opportunity to brainstorm to come up with solutions for any problems that may have emerged. All of these activities are designed to ensure fidelity to the model. In addition, IICAPS Services conducts an annual credentialing review of all sites.

In 2004 IICAPS Services implemented a Web-based data management system and reduced the number of required outcome measures. This system has made it possible to collect and use site-specific data for purposes of quality assurance, tracking fidelity to the model, and providing information on service utilization and outcomes. In addition, the data serve to inform the ongoing site consultation and credentialing processes and are used by the Department of Children and Families as part of its own quality assurance program. Currently, most IICAPS programs have two teams, a program coordinator, a program director, and a medical director. However, the statewide network is rapidly expanding so that three sites have six teams. For the past two years about 370 children and families have been discharged each year after an average length of service of six months. The average age of patients is 12 years, with a range of four to 18 years.

### **Outcome measures**

The IICAPS quality assurance process utilizes pre- and postintervention measures of child symptom severity and functioning and service utilization. In addition, the process utilizes submission of the progressive treatment planning and implementation structures, called IICAPS Tools, as markers of the successful delivery of IICAPS treatment. Current data show a statistically significant improvement in

child symptom severity and functioning as well as a decrease in the utilization of institutional care. Changes in Ohio Scales scores for problem severity and functioning—reported by parents, youths (administered if 12 years of age or older), and IICAPS clinicians—for all cases closed between July 1, 2006, and June 30, 2007 (N=372), indicate statistically significant decreases in the severity of behavior problems and increases in youth functioning from intake to discharge from the IICAPS intervention. Scores from all three groups (parents, youths, and IICAPS clinicians) indicated these significant improvements.

Likewise, for this sample, changes in the scores of the main problem identified at intake show a 3.1-point improvement (on a scale from 1 to 10) at discharge. This sample also showed a 56% reduction in the number of youths admitted for an inpatient hospitalization, a 58% reduction in the number admitted for a residential admission, and a 55% reduction in the number visiting the emergency department for a mental health issue during the IICAPS intervention, compared with the six months before IICAPS. These improvements are correlated with indicators of successful implementation of IICAPS treatment, as measured by IICAPS Tools. A prospective, randomized controlled evaluation of IICAPS at the Yale site is now under way.

#### **Adherence to the program**

An IICAPS manual details all aspects of the delivery of IICAPS treatment. The manual explicates the multilay-

ered purposes of the IICAPS Tools, which are designed not only to measure quality assurance but also to enhance ongoing engagement of the family members in all aspects of the treatment process. Active, ongoing engagement between the IICAPS team and the family is mediated via the five IICAPS principles of transparency, immediacy, practicality, co-construction of the treatment plan, and adherence to the model. These principles emphasize authentic family member participation by enhancing self-agency and implementation intentions. The tools also guide the implementation of social problem solving training, a well established evidenced-based treatment, as an approach to addressing the immediate issues with which the family members are struggling and to guiding future family interactions. In addition, the tools provide a mechanism to track fidelity to the IICAPS model. With the tools as its core, the treatment manual serves as the basis for initial staff training, ongoing site consultation, and annual credentialing.

#### **Conclusions**

From its single site at Yale's Child Study Center, IICAPS has developed into what is now a 14-site, statewide network of service providers managed by IICAPS Services in partnership with the state agencies responsible for children's mental health services and for management of Medicaid funding. As of January 1, 2006, IICAPS became the first and only in-home treatment model to be funded specifically by the Behavioral Health Partnership, an en-

tity through which mental health funds from the Department of Children and Families and Medicaid funds from the Department of Social Services are merged.

The majority of children receiving IICAPS are Medicaid-eligible youths who meet IICAPS criteria and whose care is managed through the Administrative Services Organization tied to the Behavioral Health Partnership. The fee-for-service rate paid to providers by the Behavioral Health Partnership is designed to encourage providers to implement the IICAPS model and drive the expansion of current programs. The large waiting lists that have developed at almost all of the 14 IICAPS sites bear testament to the strong demand for the service and the respect that it has engendered in the ten years since its inception.

Areas outside of Connecticut have expressed an interest in implementing the IICAPS model, and a private foundation has provided support for dissemination. The IICAPS family-focused, child-centered approach shows promise of being an effective practice in the treatment of children with serious psychiatric disorders in the context of chronic, pervasive exposure to negative environmental influences.

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### **Applications Invited for the 2008 Achievement Awards**

The American Psychiatric Association's (APA's) Psychiatric Services Achievement Awards recognize programs that have made an outstanding contribution to the field of mental health, that provide a model for other programs, and that have overcome significant challenges. The winner of the first prize, or Gold Award, in each of two categories—community-based programs and institutionally sponsored programs—receives a grant. Programs also may be selected to receive a Silver or Bronze Award.

To obtain an application form for the 2008 competition or for additional information, write to Achievement Awards, APA, 1000 Wilson Boulevard, Suite 1825, Arlington, VA 22209-3901; phone: 703-907-8592; or visit [www.psych.org/psych\\_pract/awards.cfm](http://www.psych.org/psych_pract/awards.cfm).