## Significant Achievement Awards

#### Using Continuous Quality Improvement to Reduce Length of Stay—Medication Compliance Improvement Program, Riverside County Inpatient Mental Health Facility, Riverside, California

A program to improve medication compliance in an acute psychiatric facility achieved a 50 percent reduction in patients' noncompliant days and decreased unnecessary and costly length of stay by 30 percent, saving the facility \$800,000 during the program's first two years.

Riverside County (Calif.) Mental Health Inpatient Treatment Facility has a 77-bed capacity. It is run by the county mental health department, which serves a population of about 1.4 million. A 1994 quality assessment at the facility revealed that irrational medication refusal by patients caused an unnecessary delay in treatment, resulting in lower-quality care and higher costs due to longer patient stays. (Irrational refusal occurs when a patient decides not to take medications because of delusions or unreasonable denial of illness.) Medication refusal also entails a risk to staff and other patients. The assessment found that 30 percent of patients requiring seclusion and restraint had refused medication in the past 24 hours.

A multidisciplinary team made up of administrative and front-line staff used continuous quality improvement methods to identify how the process of dealing with irrational refusals could be changed. The Medication Compliance Improvement Program, which was implemented in May 1995, grew from the team's findings and solutions.

The team found that when a patient at the Riverside facility refused medications, he or she went unmedicated for an average period of eight to ten days. Noncompliant patients stayed in the hospital for an average of 15 days—twice as long as other patients. The team identified poor chart documentation of refusals and poor staff communication as a reason for delay in treatment. Problems in procedures for filing court petitions when patients refused medication were also cited.

In California a "Riese hearing" is required whenever a patient refuses psychotropic medications. This legal procedure is named after a 1987 court case that granted involuntary patients the right to make decisions about psychotropic medications unless a legally defined emergency exists or it is legally determined that the patient does not have the capacity to refuse. If the Riese petition is granted by the court, a patient may be given the medications involuntarily.

The team pinpointed delays in Riese petition procedures. Some psychiatrists did not order the petition for up to nine days after a patient refused medication, the facility's legal section spent three days processing the petition, and county court staff took five to ten days to schedule a hearing.

A lack of patient and family education about the importance of compliance was identified by the team as another root cause of the problem. They believed that patient counseling by a staff member after each medication refusal would lead to increased compliance. A one-hour training session on how to intervene when a patient refuses medication was developed, and all physicians, nurses, and social workers were required to attend. A

daily medication education group for patients, facilitated by nursing staff, was also implemented. Staff social workers focused on compliance in interactions with family members and introduced the topic of medication compliance during family support groups.

As a solution to the chart documentation problem, three- by six-inch green stickers were printed for placement by the nurse in the chart after each medication refusal. The nurse fills in information about the medications refused, the reason for refusal, the patient education intervention after the refusal, and the patient's response to the intervention. A space at the bottom of the sticker requires the physician to fill in the date and time he or she noted the information.

The Riese hearing procedures were changed. The physician is now required to order the petition on the second day of refusal. The order, which must be forwarded to the hospital's legal section by noon of the same day, is sent or faxed to the county counsel not later than 3 p.m. that day. Staff from the hospital's quality improvement office monitor the timeliness of each petition. Late petitions are reviewed with the physicians who ordered them. Finally, staff from the legal section and management staff intensified liaison work with the county counsel to expedite court scheduling.

By the end of 1995, the program achieved remarkable improvements that were sustained through 1996. Each month between 97 and 100 percent of all medication refusals are documented in the chart, and education interventions are made in these instances. Between 86 and 100 percent of Riese petitions are filed in a timely manner; none are filed later

than the fourth day after refusal. The court now schedules Riese hearings within three to five days of the filing. Approximately 60 percent of all petitions are canceled because the patients have become compliant.

Between January 1995 and December 1996, the number of noncompliant days per patient decreased by 50 percent, from about ten days to four. The average length of stay for a noncompliant patient fell from 15 days to ten, a 30 percent reduction. Episodes of seclusion and restraint were reduced up to 10 percent. The changes achieved by the program saved the hospital \$800,000 in its first two years.

E. Richard Dorsey, M.D., M.B.A., the hospital's medical director, and John J. Ryan, the mental health director, attribute the success of the program largely to the way in which front-line staff responded to the continuous quality improvement ap-

proach and used the techniques to take ownership of the problem and implement solutions. Management staff were impressed that the solutions were simple, realistic, and costefficient.

The Medication Compliance Improvement Program has won awards from the California Association of Public Hospitals and the National Association of Public Hospitals. It was cited as an excellent example of how continuous quality improvement efforts, once confined to private-sector industry, can transform the delivery of public-sector services.

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# Eliminating the Use of Restraints Among Elderly Patients Who Fall Frequently—The Soft Environment Program, Walter P. Reuther Psychiatric Hospital, Westland, Michigan

Padding and heavy carpeting on the floors and walls, stacked mattresses in place of beds, large beanbag chairs and futons in the dayroom, and other innovative "softening" of the environment have allowed a geropsychiatric hospital to eliminate virtually all restraints among patients who fall frequently.

Since 1992 administrators and staff at Walter P. Reuther Psychiatric Hospital in Westland, Michigan, have been strongly committed to a restraint-free environment for all patients, especially those who fall frequently. The 160-bed tertiary care facility, which is owned and operated by the State of Michigan, serves individuals age 60 and older who generally have concurrent long-term medical and psychiatric illnesses. Before the program was implemented, patients who fell frequently often spent more than eight hours a day in restraints.

Research has shown that elderly patients who are restrained for long periods actually suffer more falls, due to loss of muscle mass and bone density and increased cardiovascular instability from inactivity. Patients who are restrained usually engage in constant efforts to rid themselves of the restraints, leading to persistent agitation. Patients' loss of dignity and freedom may lead to sadness and depression.

In April 1992 a task force was formed to develop a plan for a restraint-free environment. A systematic training program for staff in creative approaches to handling falls without restraints was developed. An initial goal was to encourage staff to reconceptualize their role. Instead of taking the approach that patients who fall frequently must be restrained so the facility can avoid liability, staff members ask themselves, "Why are these patients falling, what can we do to prevent the falls without restraining them, and how can we engage them in activities with no restrictions on their freedom of movement?"

In the first months of the restraint-free efforts, furniture throughout the hospital was secured to prevent tipping over, and environmental obstructions were minimized. Staff learned to keep clutter that might cause falls to a minimum and to immediately dry wet floors. Night lights were installed in all patients' rooms, and staff were taught to set beds at the lowest level and to keep side rails down to prevent patients from attempting to climb over.

The task force assessed all patients to identify those who were excessively restrained. Nineteen patients were found to meet the criteria. The task force cited various reasons for restraint, including preventing falls, deterring patients from pulling out tubes, positioning patients properly, and providing a rest period for patients with hypermotor behavior.

In the remaining months of 1992, administrators and staff met with a consultant to identify and implement alternatives to restraints. Extra bandaging was placed over tube sites to stop patients from pulling out feeding tubes and catheters. Some patients were dressed in jumpsuits to prevent their access to tubes. Restraints in wheelchairs were replaced with a Velcro seat belt, giving patients freedom to get up. Another alternative suggested was a "soft environment."

In April 1993 a patient room was converted into a soft environment for two patients, and in September the environment was extended to four other bedrooms and a dayroom. Stacked mattresses were substituted for institutional beds, and futons and large bean-bag chairs replaced traditional dayroom furniture. Walls, sills, floors, and bed frames were softened with padding and carpeting. Staff were trained to feed and change patients and conduct programs in this environment.

Before the Soft Environment Program was implemented, patients who were evaluated for the program spent more than 2,300 hours a year in restraints. Currently, use of restraints has been virtually eliminated. Potential users of the soft environment are identified early. Patients' families are informed and educated about the program's goals. Some families are ini-

tially resistant to the soft environment because they have become accustomed to seeing their elderly relative restrained. Staff commitment to a restraint-free environment has remained high.

The innovative program was started under the leadership of hospital director Norma C. Josef, M.D., and Gloria Kaiser, M.D., the director of medical services. The hospital and all of its programs are funded through an annual legislative appropriation from the state. Creation of the soft environment cost about \$25,000. An additional \$50,000 has been approved to extend the environment to other areas of the hospital.

Staff are eager to educate others about the benefits of the program—no other program like it is known to exist. They have given tours to com-

munity groups and others. Surveyors of the American Council of Graduate Medical Education have made site visits along with students from Wayne State University's geropsychiatry fellowship program.

A representative of the American Psychiatric Association's award committee who visited and evaluated the program noted that it was particularly encouraging that state authorities were willing to fund such an innovative program, especially one that has turned out to have the potential to benefit frail elderly people throughout the country.

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### Helping At-Risk Rural Children and Their Communities—Project BASIC (Better Attitudes and Skills in Children), Tennessee Department of Mental Health and Mental Retardation, Nashville

A school-based program serving 19 rural elementary schools in 17 Tennessee counties has successfully brought prevention and early intervention services to low-income rural communities with few mental health resources. In 1996 nearly 5,000 children in kindergarten through grade 3 and more than 500 teachers took part in the program's biweekly prevention activities. Among the nearly 400 children who were identified as being at risk, 128 were found on evaluation to have a serious emotional disturbance.

Project BASIC (Better Attitudes and Skills in Children) began in 1985 at eight schools in five counties. Its current activities in 17 counties are managed by a statewide project director. A child development specialist is assigned to each school and works from an office in the school. The specialist is an employee of that county's community mental health center (CMHC). Most specialists live in the communities in which they work; most have a master's degree in education or a social service, and two have a doctorate in psychology.

The specialist promotes a wellness theme, with classroom and schoolwide activities, and helps teachers identify children who have a serious emotional disorder or are at risk of developing one. The four basic activity areas are mental health education, early intervention services, teacher consultation, and school climate enhancement.

Biweekly 30-minute mental health education presentations are made in every kindergarten through third grade classroom. In fiscal year 1995-1996 nearly 3,400 such sessions were provided at the 19 schools. The curriculum focuses on developing selfesteem, social skills, conflict resolution skills, and problem-solving and communication skills. The program promotes recognition and identification of feelings; maintenance of positive relationships with family members, classmates, and friends; and development of a healthy self-concept. Teachers may request classroom presentations on special topics, such as coping with divorce or death in the family. Parent education includes formal and informal efforts to teach parents about child development and parenting skills.

In the area of early intervention, the child development specialist assesses each referred child, with parental permission. When a need for services is found, the specialist provides the family with information and referral to community services, often supplying extra support to help them gain access to needed services.

The child development specialist provides teacher consultation in a variety of forms. Case consultation helps teachers identify at-risk children and plan the most effective response. Program consultation supports teachers and administrators in creating a classroom and school environment that encourages healthy child development. Personal consultation is available from the specialist to help all school staff identify and address their own mental health needs. The specialist also coaches teachers in implementing effective behavior management programs in the classroom.

Finally, an important responsibility for the specialist is to develop an annual plan of activities to modify the school's environment for the benefit of students and staff. Recent projects have included school newsletters, academic pep rallies, and a student-and teacher-of-the-month recognition program.

Project BASIC takes an environmental approach, raising awareness of children's mental health needs in the entire school community—teachers, administrators and all staff, and parents. A fundamental role of the child development specialist is to enable the people in a child's community to work together on behalf of the at-risk child, ensuring that children and families are linked to the mental health services they need. Each CMHC provides the specialist with a backup staff of psychiatrists, psychologists, and other mental health professionals who conduct the diagnostic evaluation and provide treatment. Support staff at the CMHC provide record-keeping services for the child and family. All project staff, consultants, and the state coordinator meet annually; regional meeting are held quarterly.

Evaluation activities include a monthly contact report compiled by each specialist, which provides a summary of activities in the four service areas. Twice each year, the project director conducts kev-informant interviews with each school's principal and two randomly selected teachers using a structured interview instrument. At the end of each school year a parent survey collects information about the visibility and acceptance of the project and parents' satisfaction with services. Current surveys indicate that 98 percent of parents are satisfied. A formal evaluation is currently in progress.

Project BASIC is funded by the Tennessee Department of Mental Health and Mental Retardation with funds from the state's federal mental health block grant. Each site is monitored twice a year for contract compliance by the department. The budget for fiscal year 1996–1997 was \$515,000. The average cost per site in the previous fiscal year was \$36,000. In 1997 three new BASIC programs in will be introduced in three additional counties.

The Project BASIC model has been featured at state and national meetings. A representative of the American Psychiatric Association's award committee who visited a program site commended Project BA-SIC for effectively integrating prevention and intervention, making mental health care available to families in a nonthreatening manner, and greatly enhancing their access to services.

For more information, contact Louise Barnes, Ph.D., or Sandra Daigneau-Heath, M.S., at the Tennessee Department of Mental Health and Mental Retardation, 710 James Robertson Parkway, Nashville, Tennessee 37219; phone, 615-532-6767; fax, 615-532-6719.

### **Applications for 1998 Achievement Awards**

The American Psychiatric Association is now accepting applications for the 1998 Achievement Awards. The awards will be presented at the Institute on Psychiatric Services, to be held October 2–6, 1998, in Los Angeles. The deadline for receipt of applications is January 16, 1998.

The American Psychiatric Association presents the awards each year to recognize programs that have made an outstanding contribution to the mental health field, that provide a model for other programs, and that have overcome obstacles presented by limited financial or staff resources or other significant challenges.

The winners of the 1998 awards will be selected by next year's Achievement Awards board, chaired by Pierre A. Rioux, M.D., of Minot, North Dakota. In the 1998 awards competition, first prizes will be selected in two categories of applicants—larger academically or institutionally sponsored programs and smaller community-based programs. Programs that submit applications for the 1998 awards will be assigned to one of these categories by the Achievement Awards board. The winner of the first prize in each category will receive a \$5,000 grant, made possible by the Roerig division of the U.S. Pharmaceuticals Group, Pfizer, Inc. The first-prize winners also receive plaques, and the winners of Significant Achievement Awards receive certificates.

To receive an application form or additional information, write Achievement Awards, American Psychiatric Association, 1400 K Street, N.W., Washington, D.C. 20005, or phone 202-682-6173. An application form is also available on the APA's Web site, www.psych.org.