

Practice Parameter for the Prevention and Management of Aggressive Behavior in Child and Adolescent Psychiatric Institutions, With Special Reference to Seclusion and Restraint

ABSTRACT

This parameter reviews the current state of the prevention and management of child and adolescent aggressive behavior in psychiatric institutions, with particular reference to the indications and use of seclusion and restraint. It also presents guidelines that have been developed in response to professional, regulatory, and public concern about the use of restrictive interventions with aggressive patients with regard to personal safety and patient rights. The literature on the use of seclusion, physical restraint, mechanical restraint, and chemical restraint is reviewed, and procedures for carrying out each of these interventions are described. Clinical and regulatory agency perspectives on these interventions are presented. Effectiveness, indications, contraindications, complications, and adverse effects of seclusion and restraint procedures are addressed. Interventions are presented to provide more opportunities to promote patient independence and satisfaction with treatment while diminishing the necessity of using restrictive procedures. *J. Am. Acad. Child Adolesc. Psychiatry*, 2002, 41(2 Supplement):4S–25S. **Key Words:** seclusion, restraint, chemical restraint, preventing aggressive behavior.

The scope of this practice parameter is to examine methods of preventing aggressive behavior in institutions before the need for seclusion or restraint is necessary, review the current state of literature about the safe implementation of seclusion and restraint, illustrate ways of using patient and staff processing of seclusion or restraint events to promote the use of alternative strategies and therefore lessen further need for these interventions, and identify current research questions, which will help improve clinical practice with these interventions.

The effective use of prevention strategies can help children and adolescents master the difficult developmental skills of coping with internal distress and external conflict. When prevention strategies are ineffective and a child or adolescent is in danger of hurting himself/herself or others, seclusion or restraint is indicated.

This parameter describes recommended clinical practice. At times, these recommendations are different from regulatory guidelines and will be noted as such. Familiarity with federal, state, and other regulatory agency and institutional regulations is necessary to ensure that treatment requirements mandated by these agencies are met. For the purpose of this parameter, *parent* is used to mean biological, foster, and adoptive parent, as well as legal guardian.

EXECUTIVE SUMMARY

The executive summary provides an overview of the most important points and recommendations that are made in this practice parameter. The treatment of patients who may require seclusion or restraint requires the consideration of many factors that cannot be conveyed fully in a brief summary. The reader is encouraged to review the pertinent portions of the entire practice parameter. Each recommendation in the executive summary is identified as falling into one of the following categories of endorsement, indicated by an abbreviation in brackets in the list below. These categories indicate the degree of importance or certainty of each recommendation.

“Minimal Standards” [MS] are recommendations that are based on substantial empirical evidence (such as well-controlled, double-blind trials) and/or overwhelming clinical consensus. Minimal standards are expected to apply more than 95% of the time, i.e., in almost all cases. When the practitioner does not

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follow this standard in a particular case, the medical record should indicate the reason.

“Clinical Guidelines” [CG] are recommendations that are based on empirical evidence (such as open trials, case studies) and/or strong clinical consensus. Clinical guidelines apply approximately 75% of the time. These practices should always be considered by the clinician, but there are exceptions to their application.

“Options” [OP] are practices that are acceptable but not required. There may be insufficient empirical evidence to support recommending these practices as minimal standards or clinical guidelines. In some cases they may be appropriate, but in other cases they should be avoided. If possible, the practice parameter will explain the pros and cons of these options.

“Not Endorsed” [NE] refers to practices that are known to be ineffective or contraindicated.

PREVENTION OF AGGRESSIVE BEHAVIOR

Intake and Assessment

Collecting the history regarding aggressive behavior may begin with the intake phone call, continue through the admission process, and be part of the psychiatric, nursing, and social work assessments [CG]. Intake staff, admission staff, and program staff should systematically communicate to patients and their families that patients will be encouraged and expected to make every effort to manage their own behavior [MS].

The management of aggressive behavior begins with diagnosing and treating the underlying psychiatric illness. The evaluation of a patient should include a review of aggressive behavior, including triggers, warning signs, repetitive behaviors, response to treatment, and prior seclusion and restraint events that are associated with aggressive acts [MS]. Cultural factors may influence the triggers and expression of aggression by patients and the response to aggression by staff, and these factors should be considered in treatment facilities [CG]. Cognitive limitations, neurological deficits, and learning disabilities should be noted during intake evaluations [MS]. A medical evaluation of the patient should identify factors that may require modification of seclusion and restraint procedures [MS].

Treatment Planning

The treatment plan should include strategies to prevent aggressive behavior, de-escalate behavior before it becomes necessary to use restrictive interventions, and initiate psychological and psychopharmacological treatments for treating the underlying psychopathology [MS].

Patients with a history of aggressive behavior may benefit from anger management, problem-solving, and psychoeducational programs [CG].

Staff Training

Repeated training in the management of aggressive behavior is necessary to develop the high degree of competence this work requires [MS]. Good training promotes the retention of qualified staff. Training should include updated information about seclusion and restraint practices, assessment of acuity levels to allow changes in staffing on a shift-by-shift basis as needed for patient safety, frequent practice in using restraint equipment, training in documentation, training in seclusion and restraint audits, and annual certification in cardiopulmonary resuscitation. Facilities, staff, and physicians should educate themselves at least annually on updated seclusion and restraint information from academic, regulatory, patient advocacy, and professional resources [MS].

CRISIS MANAGEMENT

De-escalation Strategies

Each unit should have its own de-escalation program that helps patients manage angry outbursts [CG]. Anger management and stress reduction techniques are important components of prevention in psychiatric facilities and should be a component of a psychoeducation program for children and adolescents. If less restrictive options have failed or cannot be safely applied, seclusion and restraint procedures may be required.

Indications for the Use of Seclusion or Restraint

The only indications for the use of seclusion and restraint are to prevent dangerous behavior to self or others and to prevent disorganization or serious disruption of the treatment program including serious damage to property. Measures promoting the child's self-control or less restrictive options must have failed or are impractical [MS].

Seclusion and restraint should not be used as punishment for patients, for the convenience of the program, where prohibited by state guidelines, or to compensate for inadequate staffing patterns; they should not be instituted by untrained staff [NE]. When it becomes necessary to implement seclusion and restraint, the autonomy and dignity of the patient must be preserved as much as possible [MS].

Ordering and Monitoring Seclusion and Restraint

The decision to seclude or restrain a patient must be made by the professionally trained staff working with the patient at the time of the aggressive behavior in consultation with a physician [MS]. Seclusion, physical restraint, and chemical restraint should not be ordered on a pro re nata (p.r.n.; as the occasion may arise) basis [NE]. All patients in seclusion or restraint must be monitored continuously. All restrained patients should have their pulse, blood pressure, and the range of motion in their extremities checked every 15 minutes [MS].

The need for nutrition, hydration, and elimination and the physical and psychological status and comfort of the patient should be monitored and responded to once these needs are identified [MS]. The patient's family should be informed of use of seclusion or restraint [MS]. Once the child or adolescent is settled and has regained self-control, the seclusion or restraint should be terminated [CG].

Physical and mechanical restraints that cause airway obstruction must not be used (e.g., choke holds or covering the patient's face with a towel, bag, etc.) [NE]. With supine restraints, a patient's head must be able to rotate freely. With prone restraints, the patient's airway must be unobstructed at all times (i.e., not buried) and the patient's lungs must not be restricted by excessive pressure on the patient's back [MS].

Chemical restraint is the involuntary use of psychoactive medication in a crisis situation to help a patient contain out-of-control aggressive behavior. Chemical restraint is to be distinguished from the pharmacological management of a patient's underlying illness. The decision to order a chemical restraint must consider the available medical and psychiatric history of the patient, including concurrent medications being used [MS]. Chemical restraints must be administered and continuously monitored by trained nursing personnel. In general, oral medication should be offered prior to the administration of parenteral medication. To avoid aspiration, oral medication must always be given when the patient is sitting up or standing.

Health Care Financing Administration (HCFA) regulations require that a licensed independent practitioner have face-to-face contact with the patient within 1 hour of the initial order for seclusion or restraint. In addition, the patient's treating physician must be consulted as soon as possible if the treating physician is not the practitioner who ordered the seclusion or restraint.

Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards allow qualified, registered nurses or other qualified, trained staff to initiate the use of seclusion or restraint. An order for the seclusion or restraint must be obtained from a licensed independent practitioner as soon as possible but no longer than 1 hour after the initiation of the seclusion or restraint. In Medicare/Medicaid-funded programs a physician or licensed independent practitioner must conduct a face-to-face evaluation of the patient within 1 hour of the initiation of a restraint or seclusion as required by the HCFA interim final rule for Patients Rights, August 1, 1999. In other facilities the initial evaluation of patients in seclusion and restraint is 2 hours for a patient aged 17 and younger and 4 hours for ages 18 and older. If the patient is no longer in seclusion or restraint when the original order expires, the licensed independent practitioner must conduct an in-person evaluation of the patient within 24 hours of the initiation of the seclusion or restraint. Verbal and written orders are limited to 1 hour for children younger than age 9 and 2 hours for individuals aged 9–17. The order for continuation of a restraint

or seclusion can be made by a qualified registered nurse or other qualified trained individual who has been authorized by the organization to perform this function. However, a licensed independent practitioner must perform an in-person reevaluation at least every 4 hours for individuals 17 years and younger.

JCAHO standards for restraint and seclusion do not apply when a staff person physically redirects or holds a child, without the child's permission, for 30 minutes or less; when the individual is restricted for 30 minutes or less from leaving an unlocked room (time-out); or when an individual is restricted to an unlocked room or area.

The HCFA regulations and JCAHO standards were current at the time of the publication of this parameter. However, this is an area of regulatory oversight that has been in rapid evolution and practitioners should stay informed of the new regulations and standards as they are announced. (see www.jcaho.org, www.hcfa.gov).

PROCESSING STRATEGIES

The use of seclusion and/or restraint should be followed by a debriefing discussion that allows the patient to process and understand what has happened [MS]. The staff should review with the patient the events that triggered the seclusion or restraint; they should discuss with the patient alternate strategies to avoid similar incidents and arrange whenever possible for the patient to make amends or do restitution to those who have been injured. Every episode of seclusion and restraint must be documented in the patient's medical record [MS]. JCAHO requires that patients be allowed written comment about the experience. Staff participating in a seclusion or restraint should review the episode in a separate debriefing session and document recommendations and findings for the facility's committee that reviews seclusion and restraint reports [MS].

Administrative Oversight

Strong clinical leadership is essential in the management of aggressive behavior in order to minimize the need for seclusion and restraint. Facilities must have a committee that provides oversight of the practice of seclusion and restraint [MS]. This may include a review of restrictive interventions; restraint equipment; staff training; staff retention; patient and parental concerns about seclusion and restraint; and peer review of the application and use of seclusion, mechanical and chemical restraint, and restraint equipment. A patient and family ombudsman should also be available to review concerns about restrictive interventions [OP].

SPECIAL POPULATIONS

This parameter may have applications for children and adolescents in general hospitals, detention centers, and group homes that use aggression management programs. However, modifications may need to be made for individuals with devel-

opmental disabilities, individuals treated within emergency departments, and individuals in pediatric units. For children and adolescents who have a trauma history, the use of physical and mechanical restraint are discouraged; seclusion may be used preferentially.

LITERATURE REVIEW

The list of references for this parameter was developed by searches of *PsychLit* abstracts, by reviewing the bibliographies of book chapters and review articles, and by asking colleagues for suggested source materials. The *PsychLit* search covered the period 1993–1999, using the following words: *seclusion*, *restraint*, *physical holding*, and *chemical restraint*. The search yielded 353 articles.

DEFINITIONS

Chemical Restraint: A drug used as a restraint is a medication used to control behavior or to restrict a patient's freedom of movement and is not standard treatment for the patient's medical or psychiatric condition. Chemical restraint is different from the ongoing use of medication for the treatment of symptoms of underlying psychiatric illness.

Mechanical Restraint: Use of leather or cloth restraints, papoose board, calming blanket, body carrier, and other implements used in restraint procedures.

Physical Restraint: Restraint that involves one or more staff members in bodily contact with the patient and does not use a mechanical apparatus.

Preventive Aggression Devices: Wrist-to-waist and ankle-to-ankle devices that allow an adolescent patient to move freely on a ward and participate in treatment while limiting his or her ability to assault others.

Prompts: Directions given by staff to encourage safe behaviors.

Restraint: The involuntary immobilization of a person through the use of chemical, physical, or mechanical means.

Restriction: Confining or limiting a patient to a specific area (e.g., room, ward, etc.) so that he or she cannot participate in the regular program activities.

Seclusion: The involuntary confinement of a person in a room alone so that the person is physically prevented from leaving.

Time-out: A process in which a child or adolescent can calm down usually by being quiet and disengaging from current stressors. The time-out may be conducted without removing a child from peers (inclusionary) or with the child's removal (exclusionary). It may be staff-directed or at the child's request (self-directed).

Warnings: Prompts that identify actions the child needs to take to prevent more intrusive or restrictive interventions by staff.

LEVELS OF INTERVENTION

The spectrum of crisis management interventions can be conceptualized in three levels.

LEVEL 1: NONRESTRICTIVE INTERVENTIONS

Level 1 interventions are designed to increase the patient's behavioral self-control and encourage self-determination, while preserving the safety of the patient, others, and property. Techniques in level 1 build on the patient's skills and abilities to facilitate more adaptive behaviors. Examples of level 1 interventions include verbal prompting and de-escalating, modeling, negotiating, role-playing, contingency contracting, reward programs, token economies, and time-out less than 30 minutes.

LEVEL 2: RESTRICTIVE INTERVENTIONS

The patient's ability for behavioral self-control is promoted, as in level 1, but concern for the safety of the patient, others, and property is greater. Level 2 techniques use contingencies that support adaptive behavior and do not reinforce maladaptive behavior. Optimal application of level 2 interventions requires planning by an interdisciplinary team, ideally at the time of initial treatment planning. Documentation of the failure of less restrictive interventions is necessary before level 2 techniques are used. Examples of level 2 interventions include ignoring behavior ("extinction"), time-out lasting 30 minutes or longer, and room restriction.

LEVEL 3: THE MOST RESTRICTIVE INTERVENTIONS

Level 3 interventions produce both the most external control over an individual's behavior coupled with the greatest limitation on his or her autonomy. Inasmuch as these procedures may promote potentially aversive experiences for the patient, it is best to proceed cautiously while providing intensive monitoring and supervision. Level 3 procedures should be used only when clinical judgment indicates that they are necessary to ensure the safety of the patient and others, for prevention of significant damage to the program and property, and after documented failure of less restrictive interventions. With these procedures, the risk of harm to the patient and/or others outweighs considerations of promoting his or her autonomy. Examples of level 3 interventions include seclusion, physical restraint (children), mechanical restraint (adolescents), and chemical restraint.

HISTORY OF SECLUSION AND RESTRAINT

The modern practices of seclusion and restraint find historical roots in the work of Philippe Pinel and his assistant, Jean Baptiste Pussin, at the Bicetre public hospital for men near Paris, France, during the years 1793–1795 (Fisher, 1994; Weiner, 1992). Pinel viewed restrictive interventions as protecting patients from injuring themselves or others under conditions that promoted respect and personal freedom (Pinel, 1794, in Weiner, 1992). From that era until today, the interpretation and implementation of these interventions has become the basis for

debate, public inquiry, governmental regulation, and suggestions for alternative approaches.

NINETEENTH-CENTURY RESTRAINT CONTROVERSY

In 19th-century England, a nonrestraint movement led by Conolly, Chatsworth, and Hill developed within both private and public asylums (Jones, 1972; Scull, 1979). It was generated by 50 years of societal agitation that criticized restraint and the gruesome devices used in its implementation (Conolly, 1854–1855, cited in Tomes, 1988, Tuck, 1882). In 1854, a Lunacy Commission was established to regulate the practice of seclusion and restraint. It was empowered by Parliament to require asylums to maintain seclusion and restraint logs, to investigate the use of these restrictive interventions, and to pressure practitioners to use nonrestraint alternatives. It viewed restraint as a nontherapeutic approach to psychological distress.

In America, by contrast, the use of mechanical restraint was accepted and encouraged. The “peculiar violence of American insanity” (Grissom, 1877–1878), the dislike of the regulatory powers of the English Lunacy Commission, and the belief in the therapeutic nature of mechanical restraint were rationales expressed in its defense (Tomes, 1988). Thus the American use of restraint was estimated to be 10 to 15 times that of the English (Manning, 1868; Tomes, 1988).

This debate lessened by the end of the 19th century because of several factors: the demise of the “moral treatment” of psychiatric patients, the failure of the chronically mentally ill to show sustained improvement with either approach (restraint versus nonrestraint), the lack of adequate funding to treat these patients, and the advent of new treatments and new practitioners (Tomes, 1988). These factors resulted in the acceptance of seclusion and restraint as one among many treatment options for dealing with violent patients.

JUDICIAL DECISIONS

The current American rationale for seclusion and restraint is based on two cases: *Youngberg v. Romero* (457 US 307, 1982) and *Wyatt v. Stickney* (344 F. Supp 373, MD, Ala, 1973). The *Youngberg* decision permitted the restraint of a profoundly mentally retarded individual to protect himself/herself or others: “decisions made by the appropriate professional are entitled to a presumption of correctness” (Tardiff, 1996a). The *Wyatt* decision, in Federal District Court in Alabama and later applied to other venues, required that written orders for seclusion or restraint be prepared after evaluation of a qualified health care professional and set time limits for their application.

HISTORICAL REVIEW OF CLINICAL OPINION

In Tardiff and Gutheil’s opinion, seclusion and restraint indications can be stated in the following way: to prevent imminent harm to the patient or other persons when other

means of control are not effective or appropriate, to prevent serious disruption of the treatment program or significant damage to the physical environment, to assist in the treatment as part of ongoing behavior therapy (a planned intervention), to decrease the stimulation a patient receives to a manageable level, and to comply with a patient’s request for this means of coping with his or her environment (Gutheil and Tardiff, 1984; Tardiff, 1996a).

Cotton (1989) promoted the use of seclusion and restraint to help children and adolescents develop “inner controls, mature defenses, coping skills, and interpersonal skills for relating to peers and adults.” In this context, “seclusion is used as a control technique in the therapeutic management of children who are not learning internal control from other social interactions.” The author thought physical restraint could be used for a young child who needs support from care-taking adults to regain self-control. For adolescents, autonomy in regaining self-control is a major concern and mechanical restraints may be more appropriate to assist with this process.

However, seclusion and restraint have not been without critics. Since the report of traumatic experiences associated with seclusion (Wadson and Carpenter, 1976), recent literature has continued to indicate that the seclusion and restraint experience can be perceived by patients as an aversive and coercive experience with the potential for the development of post-traumatic stress symptoms (Goren et al., 1993; Mohr et al., 1998; Ray et al., 1996). The consumer/survivor movement prompted NIMH discussions about involuntary treatment. The consensus of these meetings was that “clients almost always found involuntary seclusion and restraint aversive and not treatment” (Fisher, 1994). Both supportive and critical perceptions of seclusion and restraint have been inadequately studied. Racial concerns have been raised as well, suggesting that seclusion and restraint may be used more frequently with minority youth. However, the literature gives a conflicting picture of racial effects, with some reports showing more frequent use of restraint and seclusion for African Americans (Flaherty and Meagher, 1980; Forquer et al., 1996), while an extensive review of this issue provided inconclusive data (Fisher, 1994).

CURRENT ISSUES REGARDING SECLUSION AND RESTRAINT

In the past decade, several matters have further complicated the application of current clinical guidelines and prompted a public review of seclusion and restraint practices. There has been a radical shortening of hospital stays for both children and adolescents, which limits the development of therapeutic relationships (Masters, 1997). These relationships are necessary for the prevention of aggressive outbursts and the processing of seclusion or restraint incidents. Furthermore, because of brief hospital stays, aggressive patients are often poorly stabi-

lized before their hospital discharge and so require frequent readmissions due to aggressive or psychotic decompensation, often without overall clinical improvement (Lyons et al., 1997). Magnifying this situation has been the rapid turnover of staff, in part due to low pay, high job stress, and very short patient stays with the attendant loss of gratification in the work. Turnover in many facilities approaches 30% to 50% per year (Masters, personal communication, 2000).

A national investigation of the use of seclusion and restraint was prompted by a newspaper expose of deaths during these procedures (Associated Press, 1999a; Hillenmeyer, 1999; Massachusetts Executive Office of Health and Human Services, 1998; Steadman and Snipe, 1998; Weiss, 1998a).

Physician groups and psychiatric hospitals have generally found themselves agreeing with the concerns raised in these investigations, while supporting the need for seclusion and restraint procedures (Lord et al., 1998; Massachusetts Executive Office of Health and Human Services, 1998; Riggs, 1999). Overall, however, there is growing public concern that practitioners, facilities, and even regulatory agencies have an insufficient appreciation of the potential suffering and dangers to psychiatric patients from these procedures (Lieberman and Dodd, 1999; Weiss, 1998a,b; Sixty Minutes II, April, June, 1999).

In response to these concerns and as part of its sentinel event surveys, the JCAHO Board of Commissioners reviewed 20 cases of deaths of patients, one third children, one third adults, one third geriatric patients, who were physically restrained (JCAHO, 1998b). Some of the findings, such as death from smoking while in restraints and from the use of waist and vest restraints, apply only to adults. All of the children died in therapeutic holds. Forty percent of the deaths were attributed to asphyxiation related to putting excess weight on the back of a prone patient, putting a towel or sheet over the patient's head to protect against spitting or biting, or obstructing the airway when putting the patient's arms across the neck area. Strangulation, cardiac arrest, or fire (in the case of smokers) caused the remainder of the deaths. In 40% of the deaths, two-, four-, or five-point extremity restraints were used; in 30%, a therapeutic hold; in 20%, a restraint vest; and in 10%, a waist restraint. This analysis identified the following contributory factors to the deaths: restraining patients who smoke, restraining patients with deformities which prevent proper application of the restraint, supine restraint that could predispose to aspiration, prone restraint that could predispose to suffocation, and lack of continuous observation of restrained patients.

The following areas were identified in the root-cause analysis of these deaths: inadequate patient assessment; inadequate care planning, which did not consider alternatives to restraint; restraints used as punishment; inappropriate room or unit assignment; lack of patient observation procedures and practice; staff issues in training; staffing levels that were inadequate; staff competency and credentialing problems; equipment

failures, including improper use of high neck vests in geriatric patients; use of two-point rather than the better four-point restraint; and the absence of monitoring systems or use of ones that were defective.

This analysis led to the following recommendations:

- Increase prevention attempts with less restrictive measures.
- Revise procedures for assessing medical conditions of psychiatric patients.
- Promote staff training in alternatives to physical restraint and in the proper use of holding and restraint.
- Consider age and gender in writing therapeutic hold policies.
- Revise staffing model.
- Constantly observe all patients in restraint.
- With prone restraint, ensure that the airway is unobstructed at all times (i.e., not buried) and that the patient's lungs are not restricted by excessive pressure on the patient's back (especially for children).
- With supine restraints, allow patient's head to rotate freely. Do not cover the patient's face with a towel, bag, etc., during therapeutic holding.
- Discontinue the use of high neck vest and waist restraints.
- Ensure that smoking materials are not available to patients who are in restraint.

This JCAHO study was designed to illustrate the way that examination of sentinel event material can pool specific-cause variation (the individual deaths of patients during restraint) and lead to recommendations that address common-cause variation issues within all psychiatric facilities. The performance improvement process that was recommended for studying critical issues was also modeled for these institutions.

Legislators and the General Accounting Office staff have not been satisfied with these efforts. Governmental investigation, prosecution, and regulation currently dominate the seclusion and restraint field. Hospitals and group homes have been investigated, and at least two staff have been indicted for manslaughter in different restraint-related deaths (Associated Press, 1999a-c; Hillenmeyer, 1999).

HCFA announced new regulations for hospitals participating in Medicaid/Medicare programs. They established the right for patients to be free from restraint or seclusion as a means of coercion, discipline, or staff convenience; limit the use of seclusion and restraint, both physical and chemical, to emergency situations and only to ensure the patient's physical safety when less restrictive interventions are determined to be ineffective; and require that a "physician or other licensed independent practitioner see and evaluate the need for seclusion and restraint within 1 hour after the initiation of this intervention" (Health Care Financing Administration, 1999).

The General Accounting Office report to Congress (GAO/HEHS, 1999) concluded that more than 24 patients died from restraint- or seclusion-related deaths in 1998 alone. In addition

to supporting the HCFA recommendations, the GAO urged all health facilities to develop uniform reporting requirements for seclusion- and restraint-related deaths and injuries, uniform regulations for monitoring and using seclusion and restraint, and training in seclusion and restraint with emphasis on alternatives to these procedures.

PREVENTION OF AGGRESSIVE BEHAVIOR

GUIDING PRINCIPLES

Aggressive behavior has been shown to be a repetitive behavior with similar triggers, which lends itself to self-control in many cases (Morrison, 1993; Patterson, 1982). Diagnosing and treating the underlying psychiatric illness are essential to the management of aggressive behavior. Seclusion and restraint are the most restrictive interventions in the management of aggressive outbursts. Often, aggression management programs look only to the few minutes before a seclusion or restraint and place the burden of management mostly on staff (Infantino and Musingo, 1985; Jambunathan and Bellaire, 1996; Parkes, 1996; Saint Thomas Psychiatric Hospital, 1976; Stevenson, 1991).

The effort to expand discussions about seclusion and restraint beyond crisis events has been complicated by differing views of the facility and its staff, the patients, the patients' guardians, patient advocates, state and federal regulatory agencies, and JCAHO.

For aggression management programs to work, patients must assume, whenever and wherever possible, responsibility for attempting to control their own aggressive behavior. Regulatory agencies have been interested in defining the responsibilities of hospitals and staff in handling aggressive events. Some have also supported programs to help patients control themselves so that seclusion and restraint events can be prevented (New York State Office of Mental Health Work Group on Preventive and Restrictive Interventions, 1997). In a recent newspaper review of seclusion- and restraint-related deaths in this country, Weiss highlighted the failures of staff and regulatory institutions in carrying out seclusion and restraint procedures, but ignored the importance of encouraging and teaching patients to gain control over aggressive behavior so that the use of these restrictive interventions could have been minimized or rendered unnecessary.

INTAKE AND ASSESSMENT

Psychiatric facilities admit children and adolescents with a wide variety of psychiatric diagnoses. Many of these diagnoses include aggressive behavior or angry outbursts among their symptoms. With the high frequency of comorbidity in these individuals, many have multiple risk factors for loss of self-control with the potential for the use of seclusion or restraint. Furthermore, aggression can manifest itself in different forms

including state or trait (Krakowski et al., 1989; Shaw and Campo-Bowen, 1995), proactive (i.e., predatory) (Vitaro et al., 1998), reactive (Raine et al., 1998), group-inspired, psychotic, and drug-induced. This means that aggression can be elicited by certain emotional states, be part of a person's habitual way of interacting with others, be planned or in response to identifiable triggers, be part of a group action, be the result of being influenced by altered mental states, or be induced by medication or illicit drugs. The ability and desire to control aggression varies among patients and within a patient depending on multiple factors. If an adolescent with conduct disorder who faces a jail sentence rages during a hospitalization, he or she may be at one end of the self-control spectrum and able to use aggression management skills. Another adolescent, in the throes of a phencyclidine-induced delirium, may be at the other end of the spectrum and unable to martial these skills. However, in both cases, the actual outburst is a temporary, state-dependent phenomenon, not a diagnosis or ever-present behavior.

Developing and Promoting a Therapeutic Environment

Beginning with the intake telephone call requesting admission, the hospital staff and admitting physician should promote personal responsibility and self-control with prospective patients. This will permit a therapeutic treatment environment in which staff control is used only when patient self-control is unavailable, underdeveloped, or insufficient to manage the patient's aggressive behaviors. Intake workers should be aware that, for children and adolescents, admission to a psychiatric facility can evoke many emotions and coping strategies, some of which may reflect fear, hostility, and distrust of the treating environment. These feelings can lead to explosive outbursts. For this reason, it is important for parents and intake staff to explain to children as clearly as they can the purpose of the hospitalization and the expectations for the child's participation in treatment. Intake workers can assist parents by describing the nature of the program, goals of treatment, expected behaviors, and unit rules. Agreement of the parent and child to make every effort to abide by the rules helps reinforce their role in treatment. All of these steps assist in defusing potential seclusion and restraint episodes caused by misperceptions and misunderstanding.

The issue of how limits are set on an inpatient unit may be particularly important to children and adolescents who have been physically abused and may expect or unconsciously attempt to reproduce such situations. Having handbooks describing the unit and its rules can prompt discussions that will defuse these situations. Because parents may share these concerns for the effectiveness of treatment, it is also important that together with the child or adolescent they understand and endorse the continuum of aggression management strategies that will be used during treatment. If they are not in agreement with the unit policy and procedures, there should

be further discussions to address their concerns or a referral made to an alternative facility, whenever possible. In addition, facilities should emphasize the importance of patients' motivation for self-control, desire for training in aggression management, support of treatment by parents and, if the patients are involved with the court system, by juvenile probation departments. The joint efforts of the facility, the patient, and the family are critical to successful treatment.

For optimum benefit, explanations about aggression management and the use of restrictive interventions should be developmentally appropriate, as well as multimodal. The younger the child, the greater the differences in the way these programs should be introduced. The distinction between a child's behavior problems and himself/herself is an important issue to address. Puppets can be used to engage younger children in this discussion. A preadmission visit to the unit, viewing of the timeout and seclusion rooms, and discussion of how restrictive interventions might be used may also provide an opportunity to answer children's and parents' questions and to allay fears. For older children and adolescents, role-playing and question-and-answer sessions can combat tendencies to ignore what is being said. For children with developmental, learning, and language disabilities understanding can be facilitated by combining visual, verbal, and somatosensory modalities in the presentation. Parents should participate in the mentioned activities to the fullest extent possible.

Assessing Aggressive Potential

Intake staff should be trained in normal child development, child and adolescent psychopathology, and developmental and clinical risk factors for aggressive behaviors. They should have an accurate, realistic profile of their units' capabilities to manage a child or adolescent's aggression, e.g., staff-to-patient ratio, physical design, number and design of private spaces, seclusion rooms, and restraint devices. They should communicate their findings clearly to the admitting psychiatrist, so that appropriate decisions can be made about the admission and initial treatment planning.

An important part of this assessment includes the physical characteristics of patients. For example, on an inpatient unit, a 6-foot, 350-pound patient in the midst of a manic episode could create a potentially explosive and dangerous situation. Children and adolescents who are larger, taller, or developmentally different than those in their peer group pose a similar difficulty. This situation should be foreseen by the intake assessor and addressed by developing special staffing and treatment programming, or by referral to an alternative treatment facility, if possible.

The staff's ability to meet the needs of linguistic and cultural minorities is also important. Stereotyping or profiling should be avoided in assessing patients. In particular, patients should not be assumed to be dangerous or aggressive because of their

race or culture. Approaches to aggression management training also need to consider cultural and peer influences in the child or adolescent's home environment.

Nursing and Psychiatric Assessments

An admission psychiatric and nursing assessment should include a history of aggressive behaviors to self and others, triggers, and response to restrictive interventions and psychoactive medications. A review of conduct problems (stealing, fire-setting, cruelty to animals, sexually aggressive behaviors, low frustration tolerance, running away, tantrums, self-destructive behaviors, and substance abuse) provides additional information about a patient's level of dangerousness. For maltreated youth a review of a patient's posttraumatic rage triggers may be particularly helpful. This assessment is an integral part of a standard initial evaluation and highlights potential problems with self-control. Furthermore, it could suggest treatment options that would diminish the need for seclusion and restraint when a patient is capable of using other coping strategies.

Standardized aggression evaluation instruments have been developed for adults, using both clinician and self-report information (Bech, 1994; Fava, 1997). The Overt Aggression Scale (Sourander, 1996) and the Brief Psychiatric Rating Scale (Overall and Pfefferbaum, 1982) have been used with children and adolescents. An alternative to these scales is a rating approach to violence, such as a Likert scale (Rigby and Slee, 1991). This method ranks patients according to their level of violence from low-grade hostility, such as being loud and demanding, to physical assault, such as inflicting harm which requires medical care (Morrison, 1992). While none of these scales can predict violence, they can be helpful in tracking aggressive behavior and alerting staff to potential dangers.

Medical Assessment Issues

Assessment of the medical ability of individual children and adolescents to tolerate seclusion or restraint requires knowledge of pulmonary and cardiac risk factors and their interaction with prescribed medications.

TREATMENT PLANNING

The importance of individualizing treatment planning is a focus of JCAHO standards. Treatment goals should be individualized to reflect particular triggers, targets, coping mechanisms, and outcome requirements. For example, psychotic children may defuse anger-provoking situations by distracting themselves, while anxious children may be best helped by processing upsetting events and gaining a clearer perspective on the situation.

There is general consensus that psychiatric facilities are treating patients with a higher level of acuity in shorter lengths of stay. This situation has forced programs to modify therapeutic

tic strategies (Goldstein, 1993; Soriano, 1993) and to individualize treatment from the moment of admission, even before the child or adolescent knows about the program or is known to staff. This has meant, in many cases, substituting behavioral-contingent strategies as the driving force in behavioral change, in place of interpersonal relationships (Wong et al., 1988). Before 1990, there was general support for the model of building children's internal controls from the inside out, helping to alter personal experience and beliefs through interactions with staff. Currently, behavioral programs such as anger management seek to build the individual's controls from the outside in; with practice, alterations in behavior can occur (Bloomquist, 1996; Goren et al., 1996; Kalogjera et al., 1989). Even with this change, certain program requirements remain unchanged, such as a safe environment with well-trained staff and consistent programming that can be adapted to individual needs and treatment plans.

Programmatic strategies for preventing and managing aggressive behavior in children and adolescents have to take into account the limited impulse control, immature defenses, and poor interpersonal skills which have been described for those who are likely to find themselves in seclusion or restraint situations (Cotton, 1989). These factors can also be compounded by learning disabilities (Rangecroft et al., 1997) and have often been reinforced through previous negative experiences in home, school, or institutional settings.

Anger Management and Social Skills Training

Both anger management training and social skills practice in a developmentally appropriate format, compatible with the program's policies and procedures, should be incorporated into the treatment plans of at-risk children and adolescents (Bloomquist, 1996; Goldstein and Glick, 1987). The practice of anger management skills, such as identification of triggers, distracting skills, calming down, the use of self-directed time-out, and assertive expression of concerns, can help children and adolescents manage future crises.

These programs allow for the building of therapeutic relationships between staff and patients. Identifying management skills useful for inhibiting different types of aggression (psychotic, proactive, and reactive) helps individualize treatment. Involvement of parents, guardians, and legal agents, such as probation officers, can help motivate patients to practice and use their aggression management skills. This involvement can be readily incorporated into multisystemic treatment for adolescents with conduct disorder (Borduin, 1999). There should also be a review of consequences for aggressive behavior in the program (see "Processing Strategies in Child and Adolescent Programs"), which should reinforce the importance and desirability of using self-control strategies. The "Wizard's Way" is a novel approach that combines anger management and social skills training. It involves children in a unit fantasy that promotes self-control while retaining and promoting a child's interest (Alters, 1996).

Program Strategies

While the above strategies are intended for psychiatric inpatient facilities, they may also be options for other programs—group homes, residential facilities, therapeutic wilderness programs, juvenile justice facilities, and partial hospitalization programs that use seclusion and/or restraint procedures. Alteration or modification of these strategies may be required to comply with state, federal, or regulatory agencies governing these facilities and programs.

In inpatient and residential developmental disability programs, these strategies may require modifications to meet the cognitive needs and learning styles of the children and adolescents served (Davidson et al., 1984; Powell et al., 1996).

Behavior Management of Groups

In some adolescent long-term inpatient and residential programs, the entire unit may be restricted because the actions of several patients jeopardizes safety. In other facilities, restrictions are applied to all unit patients based on their presumed complicity in abetting dangerous behavior exhibited by others that undermine milieu safety. These interventions are intended to encourage peers to support prosocial and assertive behaviors in the group. In either situation, management strategies should be planned in advance of implementation and be used only when safety issues affect the entire unit. Input may be sought from parents. Documentation of these interventions and reviews of their efficacy and necessity should be part of each patient's treatment plan.

STAFF TRAINING

Staff training on the particular needs of children and adolescents has been reviewed in residential and hospital literature focusing on psychodynamic, behavioral, staff milieu, and control issues (Cotton, 1993; Treischman et al., 1969; Wong et al., 1988). To this has recently been added training in aggression management (Bloomquist, 1996; Goldstein and Glick, 1987). Programs must train staff in specific strategies that are developmentally appropriate for carrying out seclusion and physical and chemical restraint. This should include hands-on practice with restraint equipment and techniques and biannual cardiopulmonary resuscitation training for staff by a nationally accredited agency, such as the American Red Cross.

Staffing Patterns

The largest percentage of staff and patient injuries occur during episodes of seclusion and restraint (Lipscomb, 1992). The safe management of psychiatric units requires extensive knowledge and training in managing violent and aggressive patients. Critical to this effort is a motivated and well-trained staff with extensive experience with psychiatric patients who have been violent (Infantino and Musingo, 1985). Stressors,

such as inadequate number of staff, frequent staff turnover, and inadequate training, work at cross-purposes to this effort. Various studies have identified staff factors that increase the risk of violence in psychiatric units. These include too high or too low nursing staff-to-patient ratios (Owen et al., 1998); non-nursing staff on planned leave (Owen et al., 1998); staff becoming involved in cycles of aggression and coercion (Goren et al., 1993); staff sadism (Gair, 1984); staff conflicts; lack of staff response to patient limit-testing (Erickson and Realmuto, 1983); staff fear and anger (Maier et al., 1987); and staff's need to demonstrate competence in therapeutic approach via values, shift style, and confrontation (Harris and Morrison, 1995; Joy, 1981; Morrison, 1990, 1993).

Acuity Assessment

Adequate staffing is often determined by staff-to-patient ratios. Unless these numbers reflect only ratios of nursing staff (including nurses, mental health technicians, residential care staff) to patients, they are likely to be misleading because other staff, such as social workers, activity personnel, and teachers, do not assume a direct caretaker role with patients. It is critical that each program has policies and procedures for staffing based on each patient's individual needs for care, i.e., acuity ratings. These ratings must be done on a shift-to-shift basis, with provision for changes in staffing when it is warranted. Employing on-call staff is one way to ensure that these individuals are available when needed. The rating system should be reviewed, at least yearly, by the medical staff to determine its adequacy in ensuring patient safety.

Staff Recruitment

The program must be able to recruit and retain qualified staff. Factors that support this goal include training, mentoring, supervision, respect for clinical opinions regardless of staff rank, appreciation for work performed, opportunity for professional and personal growth, and salaries or wages commensurate to the skills required to teach aggression control and management of aggressive behaviors to patients with complex psychiatric illnesses (Goren et al., 1996; Infantino and Musingo, 1985; Jambunathan and Bellaire, 1996; Kalogjera et al., 1989; Maier et al., 1987; Snellgrove and Flaherty, 1975).

Because these positions involve the care of vulnerable individuals, staff are required to have a high degree of personal integrity and stability. Work, criminal, and substance abuse histories should be checked prior to employment.

CRISIS MANAGEMENT

DE-ESCALATION STRATEGIES

Level 1: Nonrestrictive Interventions

De-escalation strategies are used with aggressive behaviors to prevent the need for the more restrictive interventions of

seclusion and restraint. The preferred strategies are those that permit children, with self-direction and/or prompts, to manage their own behavior. It is important that patients practice these strategies, so they are ready to use them in stressful situations. Strategies include ignoring peer provocations, negotiating with peers, processing with staff, and using self-directed time-out. Prompts that aid children in using these strategies should be a primary treatment intervention and should be included in the treatment plan.

De-escalating efforts with adolescents must include awareness of autonomy and peer group issues. For this reason, an adolescent's self-control is often improved by processing 1:1 with staff away from the peer group. This minimizes embarrassment and shame.

Level 2: Restrictive Interventions

Level 2 interventions are more restrictive procedures and include isolation and restriction. Removal from stimuli for verbally and physically threatening patients has been shown to decrease the need for seclusion and restraint (Canatsey and Roper, 1997). One treatment option is time-out. Time-out rooms have been shown to be an effective de-escalation setting, whether self-initiated or directed (Joshi et al., 1988). HCFA defines seclusion as "involuntary confinement in a room that the person is physically prevented from leaving" (GAO/HEHS, 1999). For this reason, the doors in time-out rooms must be unlocked and the child must not be restricted from leaving unless it is desired to convert the time-out into a seclusion. Ward or room restriction is an alternate option.

Additional Strategies for De-escalation Programs

When de-escalating crises with children, staff may find it useful to reference stable and supportive relationships in the child's life or, when these are lacking, to use examples from children's stories to delineate the protective and supportive roles that adults have in children's lives. This may increase some children's willingness to listen to staff advice. With adolescents, on the other hand, de-escalation procedures should point out that safe choices protect personal freedom. Judicious ignoring of peripheral power struggles, such as inappropriate language and abusive personal remarks, may help some adolescents accept this message and refrain from physical assault.

SOME DE-ESCALATION PROGRAMS CURRENTLY BEING USED IN NORTH AMERICA

Each clinical service should adopt and train staff in a specific de-escalation program to handle crisis situations with their patients. Current literature describes some of these programs.

The St. Thomas program (Saint Thomas Psychiatric Hospital, 1976) focuses on teaching staff ways to predict and prevent disturbed behavior and how to deal with it physically. Films,

discussions, exercises in communication, awareness of change in a patient's behavior patterns, and understanding the importance of well-timed interventions in preventing acting-out behavior are a part of staff training and review classes.

The Carkhuff Human Resources model teaches staff to demonstrate empathy via the use of cognitive and emotional strategies. The program emphasizes didactic and role-playing experiences for staff. Training focuses on reflecting the meaning of a patient's verbal messages back to him or her and asking for verification. Staff use of verbal reinforcement to encourage patient compliance and verbal warnings of impending consequences for noncompliance are stressed (Smoot and Gonzales, 1995).

Stevenson's article (1991), "Heading off Violence With De-escalation" emphasizes using verbal de-escalation techniques that focus on being aware of personal stresses, assessing the patient's verbal and body language, and listening and responding verbally and with body language in a calm, nonthreatening, and caring manner. Strategies include allowing patients to be alone in a quiet place for about 8 to 10 minutes.

The Therapeutic Crisis Intervention Program (TCI) is used in many nonmedical children's residential facilities and focuses on prevention and de-escalation through the use of the life space interview, which connects behavior to feelings and helps in the development of alternative nonaggressive options (Redl, 1959; TCI, 1980).

Management of Out of Control Behavior in Children and Adolescents: A Comprehensive Training Guide (New York State Office of Mental Health Work Group on Preventive and Restrictive Interventions, 1997) emphasizes prevention and alternative interventions to seclusion and restraint. These include anticipating aggressive behavior, giving support for prosocial and self-control behaviors, planned ignoring (extinction), cueing or prompting self-control, giving verbal warnings about unacceptable behavior, offering alternative choices, giving consequences for failure to stop the behavior, giving verbal interventions to defuse the tension and de-escalate the patient's behavior, making available quiet time to regain self-control, and using specific psychoeducational interventions from the Boys Town Psychoeducational Treatment Model (Daly et al., 1998; Furst et al., 1993). The guide recommends time-out and other strategies staff can use to teach adaptive skills and improve patient relationships.

The National Crisis Prevention Institute Program (CPI) is used in many facilities and has been shown to be effective in resolving crises (Jambunathan and Bellaire, 1996). The CPI describes four levels of crisis and patient behavioral cues (in parentheses), with staff interventions that correspond to each level.

CPI First Level (Anxiety Level, Pacing, Crying). The intervention is supportive with active listening, and the addition of psychoactive medication if needed.

CPI Second Level (Defensive Level, Irrationality, Belligerence).

The intervention is setting limits, isolating, and planning for de-escalation or physical control.

CPI Third Level (Acting Out, Aggression, Loss of Control).

The intervention is holding, isolating, and, if needed, seclusion and/or restraint.

CPI Fourth Level (Tension Reduction, Self-Control Regained).

Interventions include renewing rapport, exploring alternative coping mechanisms, and behavior contracting.

Unfortunately, there are no studies comparing the different national training models in terms of safety, efficacy, and risk or benefit. Limitations of all the approaches include lack of patient orientation before restrictive strategies are used and failure to specifically address children's and adolescents' individual needs based on age, developmental, and cognitive levels.

INDICATIONS FOR THE USE OF SECLUSION AND RESTRAINT

The following indications are common to all of the most restrictive interventions:

- Prevent dangerous behavior to self or others.
- Prevent disorganization or serious disruption of the treatment program including serious damage to property.
- Measures promoting the child's self-control or less restrictive options have failed or are impractical.

When de-escalation efforts fail or are not appropriate in the clinical situation, then containment becomes the least restrictive alternative and is carried out through the use of seclusion, physical restraint, mechanical restraint, or chemical restraint. The use of seclusion should be considered the option of first choice because it is medically safer than restraint and it preserves a greater degree of patient autonomy than restraint. This recommendation must, however, take into account situations that require converting a patient from seclusion to a restraint (e.g., when the patient is injuring himself/herself). Children may have a lower risk of self-injury in a structured program in which seclusion is used (Masters, 1998; Masters and Devany, 1992, 1995), although this requires further investigation. Adolescents, on the other hand, are more capable of injuring themselves because of their increased strength and greater likelihood of having drug-induced aggression or psychosis. Physical restraint for children and mechanical restraints for adolescents are preferred. Variances should be approved prospectively by the facility's medical staff.

Some state regulatory agencies prohibit or restrict the use of seclusion for children and adolescents. Some programs may have procedures that direct or limit the use of seclusion, and some psychiatrists and other clinicians may have treatment philosophies that dictate the use of specific restrictive interventions. In those situations, the licensed professionals should conform their practice to those approved by the state, the hospital, and their medical staffs.

The development of posttraumatic stress disorder or its reactivation with symptoms of flashbacks, nightmares, and intrusive thoughts is a potential consequence of seclusion, physical restraint, and chemical restraint, particularly when carried out in a coercive fashion (Masters, 1998). The length of time or frequency of the use of restrictive interventions required to produce these adverse effects is unknown. Whether certain diagnoses predispose to the development of adverse symptoms is also unknown and is likely to vary greatly for individual patients. The combination of strategies—seclusion plus chemical restraint, physical restraint plus chemical restraint, mechanical restraint plus chemical restraint—is often used when one strategy is ineffective. The rationale for combining interventions should be reviewed by the physician at the time they are ordered. The combination of seclusion plus mechanical restraint is not recommended.

At present, a reasonable clinical approach would be to use the most restrictive interventions only when indicated by the clinical situation as described below, and only for as brief a time period as is required for the patient to regain self-control.

CONTRAINDICATIONS FOR THE USE OF SECLUSION AND RESTRAINT

The following contraindications apply to all of the most restrictive interventions:

- Use of seclusion, restraint, or chemical restraint as punishment.
- Use for the convenience of the program.
- Use where prohibited by state guidelines.
- Use by untrained staff.
- Use when a patient would be medically compromised by the institution of seclusion and restraint.

ORDERING AND MONITORING SECLUSION AND RESTRAINT (INCLUDING REGULATORY GUIDELINES)

There continues to be controversy about the current regulations regarding the ordering and monitoring of seclusion and restraint. This has been most apparent regarding the HCFA regulation for an in-person evaluation following the initiation of seclusion and restraint. Many advocacy groups support this rule, while JCAHO and some practitioners argue this is an overly rigorous standard and impractical in rural areas where one physician may be covering a large geographical area. We have included the regulations that were current at the time this parameter was published, but practitioners are encouraged to remain informed regarding the latest regulations in this rapidly evolving area of practice.

Current HCFA Regulations (as of August 2000)

(These regulations apply to hospitals participating in Medicare and Medicaid programs.)

- Interventions must be in accordance with the order of a licensed independent practitioner.

- The treating physician must be consulted as soon as possible if the seclusion or restraint is not ordered by him or her.
- Physician or licensed independent practitioner must see and evaluate the need for restraint or seclusion within 1 hour after the initiation of this intervention (Social Security Act 42USC 1302 and 1395hh, subpart B section 482.13) (Health Care Financing Administration, 1999).

Current JCAHO Standards (as of September 2000)

- Behavioral health care standards apply to all behavioral health care settings including psychiatric hospitals, psychiatric units in general hospitals, and residential treatment centers.
- Verbal and written orders for seclusion or restraint are limited to:
 - 1 hour for children younger than age 9.
 - 2 hours for children and adolescents aged 9 to 17.
 - 4 hours for individuals aged 18 and older.
- Medicare-funded hospitals require that a physician or licensed independent practitioner conduct a face-to-face evaluation of a patient within 1 hour of the initiation of a restraint or seclusion. Non-Medicare participating hospitals that are JCAHO-approved require that a patient 17 years and younger be evaluated within 2 hours, and patients 18 or older be evaluated within 4 hours.
- Reevaluation must occur in-person every 2 hours for patients 17 and younger and every 4 hours for patients 18 and older. A qualified registered nurse or a qualified trained individual may perform the reevaluation, but the licensed independent practitioner must perform follow-up in-person reevaluations of the patient every 4 hours for individuals aged 17 and younger and every 8 hours for patients aged 18 and older.
- If the individual is no longer in seclusion or restraint when the original verbal order expires, then the licensed independent practitioner must conduct an in-person evaluation of the individual within 24 hours of the initiation of the seclusion or restraint.
- All patients in seclusion or restraint must be monitored continuously. All restrained patients should have their pulse, blood pressure, and the range of motion in their extremities checked every 15 minutes. The need for nutrition, hydration, and elimination and the physical and psychological status and comfort of the patient should be monitored and responded to once these needs are identified.
- Once the child or adolescent has settled and regained self-control, the seclusion or restraint should be terminated. Staff should support and encourage patients in calming down and regaining control of their own behavior.
- The patient's family must be notified promptly of the initiation of seclusion or restraint.

- Patient evaluation of the procedure is highly recommended.
- Clinical leadership must be informed of any individual who has two or more episodes of seclusion or restraint in a 12-hour period. The clinical leadership must be notified every 24 hours if either of these conditions continue.

The current HCFA and JCAHO regulations regarding monitoring of seclusion and restraint need to be evaluated to determine their impact on patient morbidity as well as their effect on inpatient psychiatric treatment. Questions to be studied include the following:

- Do regulations requiring licensed independent review within 1 hour and periodic face-to-face reassessments decrease patient injury and death?
- Should the same regulations for monitoring restraints be required for monitoring seclusion? (Anecdotal information suggests that the morbidity and mortality from seclusion is far less than from restraint, so theoretically the regulations governing seclusion should be less intensive.)
- What is the impact of the new regulations on the licensed independent practitioner? Do the regulations result in changes in the quality of care because of disruptions of practice in performing reviews?
- Do these regulations decrease the number of licensed practitioners willing to provide inpatient psychiatric care?
- What happens to facilities and programs that cannot meet the regulation requirements?

Review of morbidity and mortality data in light of these issues should inform agencies on ways to modify these regulations to the benefit of comprehensive patient care (Masters and Bellonci, 2001).

SECLUSION

Advantages and Disadvantages of Seclusion

Seclusion has been shown in many studies to be an effective technique for helping children de-escalate from situations in which they are harmful to themselves, others, or property (Cotton, 1989; Fassler and Cotton, 1992; Fisher, 1994; Gair, 1980, 1984; Liberman and Wong, 1984; Task Force on Psychiatric Uses of Seclusion and Restraint, 1984; Tsemberis and Sullivan, 1988). It is also incorporated in acceptable interventions by regulatory agencies (JCAHO, 1998b; New York State Office of Mental Health Work Group on Preventive and Restrictive Interventions, 1997; North Carolina, 1992).

However, some practitioners have recommended against the use of seclusion, based on a view that therapeutic programs can contain patients without it (Goren et al., 1993; Irwin, 1987) and “that confinement of this type represents further rejection and deprivation of human contact when the child most needs it and can escalate the crisis” (TCI, 1980). However, one study, which examined state law, found that prohibition of seclusion led to an increase in restraints (Swett et al., 1989). Others have

pointed out that seclusion is poorly researched (Angold, 1989; Angold and Pickles, 1993) and idiosyncratically applied (Fassler and Cotton, 1992; Goren and Curtis, 1996), either as crisis procedure or planned intervention to decrease violent behavior (Liberman and Wong, 1984).

Specific indications for seclusion are as follows:

- To decrease stimulation that is disorganizing to the child in situations in which the child is endangering himself/herself or others.

The Seclusion Process

If some members of the seclusion team are known to the child, it will help to decrease the child's fear and anxiety. Whenever possible, staff should not participate in a seclusion team if they feel unable to be therapeutic in that context. Once initiated, seclusion procedures should permit as much patient autonomy as possible. For example, staff should give directions in a calm voice and maintain a respectful but firm attitude with the child. A child should be encouraged to walk to seclusion, while other patients are directed to activities away from the area. If a child cannot be escorted to the seclusion room, he or she should be carried, with one staff member at each limb, one to support the head, and one to support the trunk.

Once the patient is in the seclusion room, clothing or possessions that could be used for self-harm or assault should be removed. A disposable hospital shirt and pants can be offered, if it appears that a patient might use clothing to suffocate himself or herself. In any case, belts, shoelaces, and jewelry—especially necklaces—should be removed, because of their potential use as instruments of self-harm. Shoes should be removed because of their potential to be used as weapons. If it appears that a child is likely to run out of a seclusion room before the door can be closed, staff should place the child at the end of the seclusion room that is farthest from the door before they exit the room and close the door. Patients should always be offered the opportunity to use bathroom facilities as needed, with portable commodes being used when the bathroom facilities are considered unsafe.

Characteristics of a Seclusion Room

Seclusion must be carried out in a room which meets appropriate building codes and has walls that cannot be damaged by assault and which has no exposed wiring. Rooms should be secured at the edges and around corners to prevent floor and wall coverings being torn off and used for weapons or for self-injury (Gutheil and Daly, 1980). Ideally, the rooms should be well-lit, painted with calming colors, and have safety windows both in the door and in a wall permitting a view of the outside, thus making it feel as open as possible. Room size should be 50 square feet at a minimum, with 8-foot ceilings. Floor, wall coverings, and room contents should have 1-hour fire rating and not produce toxic fumes if burned. Walls should be free of

objects. There should be a minimum of a 75-watt light fixture in the ceiling, and it should be tamper-proof. Room temperature and ventilation should be the same as those of other rooms in the facility. However, seclusion rooms should be air-conditioned even if other rooms are not. In any lockable room, the locks should be interlocked with the fire alarm system so that in the event of fire, the door automatically unlocks (North Carolina, 1992). Video monitoring cameras, protected from patient tampering, are a clinical option particularly in settings with severely aggressive patients, for facilities with frequent use of seclusion rooms, and for patients whose clinical and medical state is deemed to require continuous monitoring. In some situations, especially for safety, this may include monitoring the activities of both a 1:1 staff and the patient. All federal, state, and local building codes must be met. After each use, the room should be inspected for damage and potentially harmful objects such as screws, nails, wires, and wood splinters should be removed.

Improvement in the quality of seclusion rooms, possibly allowing for their customization with auditory and/or visual stimuli, would be a valuable multidisciplinary undertaking for clinicians, engineers, patients, and patient advocates.

JCAHO Draft Standards (as of May 3, 2000)

Specific for Seclusion

- Patients must be monitored continuously and in person for the first hour and then either in person or via audio and video equipment with staff in the seclusion room or looking in the window of the room from the outside, or video camera monitoring if this is consistent with the patient's condition or wishes.

Contraindications for Seclusion

- For children who are medically unstable and for whom seclusion would present a medical risk (in this case, clinical guidelines would suggest that 1:1 supervision of the patient would be a preferred intervention).

PHYSICAL RESTRAINT

Advantages and Disadvantages of Physical Restraint

Physical restraint has been described as beneficial in promoting control for some children and adolescents through attachments to emotionally important adults (Cotton, 1989) and for protection and socialization (Bath, 1994; Cotton, 1993; Miller et al., 1989; Rich, 1997; Sourander, 1996). Objections to the use of physical restraint have included its potential to be inflammatory (Gair, 1984); its inappropriateness in some children, particularly those who have been sexually abused (Cotton, 1989); its involvement in promoting an aggression-coercion cycle (Goren et al., 1993); and the lack of empirical data to support its necessity and efficacy (Masters and Devany, 1992; Mohr et al., 1998).

Physical restraint is preferentially carried out by two staff members for each child (Cotton, 1993). This situation may cause staffing shortages on the unit and deprive the other patients of needed supervision and support. Since the average length of a hold varies, and in one study it averaged 20 to 30 minutes, units could find themselves understaffed, putting their patients at risk of harm for significant time periods (Sourander, 1996).

There is a need for a careful review of the medical risks of restraint of patients (see "Intake and Assessment"). At present, both supine and prone restraints are used. Some programs advocate supine restraint. At least one national training program advocates prone restraint (TCL, 1980, 1999). There are no empirical data favoring one approach over another. Some states and the National Alliance for the Mentally Ill oppose the use of prone restraint. It is also believed to restrict diaphragm motility in obese patients and contribute to their deaths during restraint (Gutheil, personal communication, 2000). Fidone (1988) hypothesized that the use of physical or mechanical restraint with aggressive children may inhibit physiological compensation mechanisms associated with states of emotional hyperarousal and result in airway obstruction, arrhythmias, vasovagal hyperactivity, pulmonary emboli, or other fatal cardiovascular interactions.

The Physical Restraint Process

- Requires a minimum of two staff per child.
- Must have adequate staffing to treat the other children/adolescents in the program.
- Review by the medical director and facility committee on seclusion and restraint of all physical holding episodes of 1 hour or longer.

JCAHO Standards (as of May 3, 2000)

- Physical restraint for 30 minutes or less is not considered restraint and does not require the monitoring described above. Children and adolescents should be restrained in a quiet environment away from other children and should continue in the restraint until able to regain self-control. When a physical restraint exceeds 15 minutes, reassessment of its continuation by the nursing staff and the attending child and adolescent psychiatrist is clinically indicated. Gloves, gowns, and face masks may be used by staff if it is anticipated that the patient will bite, spit, or attempt to inflict intentional injury to himself/herself or staff.

Holding therapy and "rebirthing" carried out through the use of physical restraint is not endorsed.

MECHANICAL RESTRAINT

Advantages and Disadvantages of Mechanical Restraint

The use of mechanical restraint with children has been discouraged because it may provoke fear in children (Cotton, 1993).

Others recommend mechanical restraint to prevent injury to self and others, particularly to control aggressive behavior promoted by functional or organic psychosis (Gutheil and Tardiff, 1984).

Papoose boards, body carriers, and holding blankets (calming blankets) are used to transport children from the site of an aggressive outburst to a seclusion room as an alternative to being carried by staff in a "transport" hold. Comparisons of safety, patient preference, and efficacy of these methods were not found in the current literature reviewed. Holding blankets are also used in place of physical holding for children, but reports of their safety and efficacy, with particular reference to the danger of promoting airway compromise, were not found. There is also the problem of decontamination of this equipment when stained with patients' body fluids, particularly saliva, blood, and urine.

Because of the dangers to patients, all types of restraints should be reviewed at least yearly by the organization's medical staff and other appropriate committees, and the staff should be trained in their use before restraining patients. Retraining should occur annually.

The Mechanical Restraint Process

The room where a patient is to be placed in mechanical restraints should conform to the specifications for seclusion rooms described earlier. In addition, there needs to be a bed that is either bolted to the floor or sufficiently stable to support a patient struggling with restraints or staff. The patient should be placed on his or her back or stomach and be restrained with each limb wrapped with a protective collar, fastened by a strap to the restraint bed. Usually, these straps are held in place with locking clips. Each member of the restraint team must be trained in the safe manner of restraining patient limbs.

If a patient should remove the restraints, he/she should be reassessed to determine whether restraints are still needed. They should be reapplied only in those situations in which the patient has not regained control and still meets the clinical criteria for restraint.

Restraints should be removed either a limb at a time or all at once, as determined by the team leader in consultation with the ordering licensed independent practitioner. Decisions should be based on the clinical needs of the patient.

The use of ambulatory restraints (preventive aggression devices; PADS) has been described as a clinical option (Troutman et al., 1998; Van Rybroek et al., 1987) that allows the patient to participate in the therapeutic program, even when he/she is at risk of behaving aggressively. However, long-term effects on the patient—and on other patients who observe him or her—remain unexplored.

Contraindications and Dangerous Practices

- Physical or mechanical restraints that cause airway obstruction, such as choke-holds, and also covering the patient's face

with a towel, bag, etc., during therapeutic holding. With supine restraints, a patient's head must be able to rotate freely, and wherever possible, the head of the bed should be elevated to prevent aspiration. With prone restraints, the patient's airway must be unobstructed at all times (i.e., not buried) and the patient's lungs must not be restricted by excessive pressure on the patient's back (especially with children).

- In particular, the prone wrap-up (immobilizing a patient in a face-down position) has been associated with injuries and deaths and should not be used (GAO/HEHS, 1999).
- Restraint by untrained staff.
- Medical conditions which render physical restraint dangerous to the patient via potential airway or diaphragm restriction (e.g., obesity, drug intoxication).

CHEMICAL RESTRAINT

Advantages and Disadvantages of Chemical Restraint

HCFA defines chemical restraint as follows: "a drug used as a restraint is a medication used to control behavior or to restrict a patient's freedom of movement and is not standard treatment for the patient's medical or psychiatric condition" (Health Care Financing Administration, 1999). Chemical restraint and the other most restrictive interventions may be minimized by the appropriate pharmacological management of underlying psychiatric illness(es).

The literature on pharmacological treatment of aggression in children focuses on aggressive behavior as an underlying process, which accompanies certain psychiatric diagnoses (Alessi et al., 1994; Fava, 1997; Stewart et al., 1990; Walsh, 1998). Reports on chemical restraint (the emergency use of medications for aggression control) focus mainly on adult psychiatric treatment (Brizer, 1988; Tardiff, 1996b) with limited reference to children and adolescents (Thompson, 1994). A recent review emphasizing the medical risks of psychotropic medications in children and adolescents may increase awareness of the cardiovascular effects of some agents used in chemical restraint (Gutgesell et al., 1999).

Before the use of any of these agents, it is important to obtain a history of a patient's current medications and illicit drug use because of potential drug interactions (for example, the combination of phencyclidine and haloperidol may promote hypotension).

The Chemical Restraint Process

Whether given orally or intramuscularly, the onset of sedation from antipsychotic agents, antihistamines, and benzodiazepines varies from a few minutes to longer than 30 minutes. Sleepiness may persist for hours to days, far longer than is required for the patient to regain self-control. Side effects of antipsychotic agents include extrapyramidal symptoms and dystonic reactions. An option is to limit the use of neurolept-

tic medication to treatment of psychotic conditions. High doses of these medicines may be required in treatment-resistant psychotic conditions when environmental strategies such as using 1:1 staff or placement in a time-out setting are not effective (Thompson, 1994).

Dose ranges for chemical restraint have been described for adults (Tardiff, 1996b). Doses for children and adolescents have been described for the treatment of specific psychiatric disorders, which may serve as a reference point for their use in chemical restraint (Walsh, 1998).

Low-potency neuroleptics, such as chlorpromazine, and high-potency agents, such as haloperidol, have been used in the child and adolescent population. There also has been interest in the use of droperidol, a short half-life butyrophenone, as an alternative to other neuroleptic medication (Joshi et al., 1998). However, the combination of droperidol's amnestic effect and its obligatory intramuscular administration raises concerns about its potential for inducing trauma (Masters, 1998).

Scant literature was found describing the use of atypical neuroleptics clozapine, risperidone, olanzapine, or quetiapine for chemical restraint (Buckley, 1999). Their use is limited by several factors: lack of Food and Drug Administration approval for this indication, long period before onset of antipsychotic effect, and lack of an injectable form.

Short-acting anxiolytics, such as lorazepam, and antihistamines, such as hydroxyzine and diphenhydramine, have been used for chemical restraint with children and adolescents, both individually and in combination with neuroleptics. It is not clear in the literature whether the combination is either more effective or more likely to produce side effects than each agent on its own. With anxiolytics and antihistamines, a risk of paradoxical increase in rage exists, which is not possible to predict unless it has happened previously with the child or adolescent. This information should be sought during the initial psychiatric evaluation of patients for whom the use of these agents is contemplated.

Criteria for Administering Chemical Restraint

- Must be administered on a stat or emergency basis and continuously monitored (as described for mechanical restraint) by trained nursing personnel.
- The rationale for use of single versus multiple medications (e.g., antipsychotic plus antianxiety agent) and the impact of these chemical restraint medications on the other medications the child is currently using must be reviewed by the physician as part of the treatment decision and documented in the medical record.
- If possible, use should be approved by the parent or legal guardian in advance.
- Patients should be offered the option of taking the medication orally before intramuscular injections are given, whenever possible.

- Practitioners must be aware and adhere to local restrictions/regulations regarding the use of chemical restraints.

Children and adolescents who are medicated for the acute management of aggression often benefit from the decreased stimulation afforded by a time-out room. Patients must be continuously monitored and treated for allergic reactions, paradoxical reactions, dystonias, extrapyramidal side effects, and neuroleptic malignant syndrome. Monitoring should continue until the patient is awake and ambulatory.

Dangerous Practices

- Those mentioned for seclusion and restraint.
- Chemical restraint contraindicated due to a patient's medical condition (e.g., use of anticholinergic antipsychotic agents in patients with severe asthma).
- Pro re nata (p.r.n.) use of chemical restraints is prohibited.

JCAHO Standards (as of May 3, 2000)

- Considers the use of chemical restraint to be an inappropriate use of medication needing to be addressed as part of the facility's performance improvement process.

PROCESSING STRATEGIES IN CHILD AND ADOLESCENT PROGRAMS

Within the review of crisis behaviors lie opportunities to prevent their recurrence. The seclusion and restraint literature uniformly recommends discussion about the event. However, with children and adolescents, opportunities exist to create a "phoenix out of the ashes," not just rehash past failure (Cotton, 1993). A combination of tasks, which combines reflection, renewal, and repair, can serve this purpose. Clinical examination should precede processing in order to determine whether the child or adolescent is cognitively receptive to the procedure at that time. Some children may need a period for psychological recovery and reorientation prior to processing the episode.

A PROCESSING PROCEDURE

The combination of tasks might include reviewing the precipitating events encompassing a time period of several hours prior to the crisis, scripting and acting a play showing how the crisis could have been avoided, talking with the patients and staff who were involved in the crisis, making amends to those who were injured, and practicing new skills aimed at preventing the next crisis.

It may also include identifying triggers of loss of control; time-out procedures which can be used at home or school; teaching social skills that help avoid conflicts; and learning methods of confronting wrongs and making amends, which strengthen coping skills, self-esteem, and self-acceptance. The development of safety plans represents one option for sum-

marizing this information in a way that allows both patients and parents to take practical advantage of their aggression management work. The process can create new treatment strategies in the ongoing psychotherapy for the patient and his or her family and can provide treatment insights for staff.

Staff training in processing techniques should be taught to parents, family members, and outside therapists, in order to help the patient and his or her family continue work with aggression management strategies. Effective processing strategies can help the treatment team develop consistent, creative strategies with the patient, in what otherwise could have been considered nonproductive lapses in self-control.

DOCUMENTATION OF RESTRICTIVE INTERVENTIONS

The parents of the child or adolescent should be informed of the use of any restrictive intervention, including any side effects, such as dissociation or medication reactions. The family and the child or adolescent should be given the opportunity to make treatment suggestions, to aid staff in developing and modifying treatment plans which support the mobilization of self-control skills. It is hoped that the practice of these skills will enable patients with staff support to use them in crisis situations as an alternative to seclusion or restraint.

All of the most restrictive interventions (level 3 interventions) should be documented in the medical record. Elements that can be recorded include circumstances leading to the use of the restrictive intervention, review of failure of de-escalation attempts, rationale for the type of physical intervention selected, notification of the individual's family, written orders for use, behavioral criteria for discontinuation of seclusion or restraint, informing the patient of these criteria, each verbal order by the licensed independent practitioner, each face-to-face evaluation and reevaluation of the patient, assessments every 15 minutes of the individual's status, assistance provided to the individual to help him or her meet the behavior criteria for discontinuation of the restrictive intervention, continuous monitoring, debriefing of the individual with staff, any injury sustained, duration of the episode, and prevention suggestions. Adverse response to chemical restraint medications, such as dystonias or allergic reactions, should be documented in the patient's chart.

Documentation of de-escalation strategies and processing in progress notes demonstrates staff attempts to avoid the use of seclusion and restraint, as well as suggestions to promote patient self-control in its aftermath. Review of the patient's aggression management issues, and treatments that were beneficial in promoting self-control, should be reviewed in discharge summaries. This information can form the basis for further aggression management treatment if needed. A seclusion and restraint log detailing each occurrence should be maintained.

CLINICAL OVERSIGHT OF RESTRICTIVE INTERVENTIONS

All procedures should be approved by the medical staff of the facility with consideration given to state, federal, and regulatory mandates.

All seclusion and restraint procedures should be planned by trained staff who are led by qualified and trained nursing personnel. Some facilities use code teams to carry out seclusion and restraint procedures with patients. These comprise trained staff who manage all crisis situations in a facility. Teams can be an advantage if members work well together and are available at the time they are needed. Other facilities use individual trained staff, often from different units, to come together to help with de-escalation efforts and to carry out seclusion and restraint procedures. Some facilities require trained staff to wear identification symbols on their name tags indicating their training in seclusion and restraint and designating whether they are credentialed by the facility to lead the team. The use of any of these strategies would depend on the needs of each individual program and would require the approval of the facility's oversight committee.

Clinical oversight of the most restrictive interventions requires collection of data on each restrictive intervention, including the following: shift staff who initiated the process; length of each episode; date, day of the week, and time each episode was initiated; type of restraint used; whether injuries were sustained by patient or staff; and age and gender of the patient. Particular attention should be paid to multiple instances of seclusion or restraint with a patient within a 12-hour period, the number of episodes per patient, instances of seclusion or restraint that exceed 12 hours, and any use of chemical restraint. This information should be reviewed by the treatment team working with the patient and by the appropriate staff committees of the facility.

JCAHO (1998a) requires programs to have performance/process improvement teams to examine difficulties or ways to improve effectiveness of aggression management programs, de-escalation programs, and the clinically appropriate use of restrictive intervention strategies. Inappropriate use of seclusion and restraint and inappropriate use of force in carrying out these procedures or inappropriate staff behavior during the procedure must be documented and addressed immediately. Further training and supervision should occur before a staff member identified as having problems with the seclusion or restraint process participates in other such episodes. If problems continue after corrective action, termination from employment should be pursued.

EVALUATION OF RESTRICTIVE INTERVENTIONS

A valuable approach to reviewing restrictive intervention episodes focuses on understanding the processes underlying

the use of seclusion and restraint (JCAHO, 1998b,c). Its centerpiece is the examination of common-cause and specific-cause variation. As applied to aggression management and seclusion and restraint, common-cause variation is the review of critical processes that lead to repetitive program problems with seclusion and restraint. These could include miscommunication with the patient and family, particularly in the explanation of facility policies and staff expectations of patients, problems with the physical environment of the program (e.g., its seclusion and restraint facilities), and deficits in orientation and training of staff. Investigation of each of these areas might lead to suggestions for changes in communication and training procedures or program physical structure. When changes are implemented, data analysis can demonstrate whether common-cause variation has been addressed and remediated.

Specific-cause variation refers to adverse events with aggression management or seclusion and restraint with an individual patient, such as multiple restraints or injury. The study of the individual patient's progress (from admission through the adverse events) offers the best opportunity to redesign the patient's treatment and evaluate whether the specific-cause variation has been addressed.

The study of these types of process variations will likely lead to entirely different conclusions and solutions. Both approaches offer treatment opportunities that can be subjected to ongoing measurement and review.

Another processing opportunity is the report and study of sentinel events, defined as events that cause permanent impairment or death. The JCAHO study, through the use of root-cause analysis, leads to suggestions for reducing the risk of the particular event examined. See, for example, JCAHO sentinel events study in the history section of this document.

SPECIAL POPULATIONS

DEVELOPMENTAL DISABILITIES AND MENTAL RETARDATION

Approaches to the use of restrictive interventions with children and adolescents with developmental disabilities are generally the same as for children without disabilities. Actual procedures may vary according to state laws, regulations, statutes, and mandates. However, it is important to consider the developmental level of each patient in order to select communication strategies (e.g., verbal and visual) best suited to his or her comprehension abilities. Parents and caretakers should be involved in treatment planning. Physical restraint procedures for challenging behaviors of mentally retarded children and adults have recently been reviewed (Harris, 1996). Harris concluded that there are many processes that mediate the outcome of restraint used with this population. Both contingent restraint, used to control aggressive behavior, and non-

contingent restraint, usually used to suppress self-injury, can result in long-term reduction in target behaviors, especially when fading is used for contingent restraint and staff are involved with treatment planning. Harris also states that emergency restraint risks injury to both staff and patients.

PEDIATRIC SERVICES AND EMERGENCY DEPARTMENTS

Pediatric units and emergency services usually have seclusion and restraint procedures of their own. A recent statement of the American Academy of Pediatrics (1997) included the following recommendations: give an explanation to children about the necessity for restraint and allow them to respond to therapeutic holding; the procedure must be ordered on a time-limited basis by a physician, and an explanation must be given to family members about the necessity for the restraint. The child's neurovascular status must be appropriately assessed, the procedure must be in compliance with hospital regulations, and the restraint must accomplish its intended purpose.

HCFA regulations for acute medical and surgical units have new criteria for the use of mechanical restraint and chemical restraint (Social Security Act 42USC 1302 and 1395hh, subpart B section 482.13) (Health Care Financing Administration, 1999). They are similar to the behavioral criteria described elsewhere in this parameter, including the requirement for a face-to-face assessment of the patient by a licensed independent practitioner within an hour after the restraint is ordered.

Child and adolescent practitioners, particularly those in consultation-liaison positions, may be able to provide support to pediatric services and emergency services with information on the use of seclusion and restraint in psychiatric facilities. Child and adolescent practitioners may also offer consultation on the use of medications to treat underlying psychiatric illness and thus reduce the need to use either mechanical or chemical restraint.

OTHER FACILITIES

Information from this parameter may be applicable to nonpsychiatric facilities that treat children and adolescents who have aggressive behavior. Such facilities may include detention centers, juvenile justice residential facilities, schools, wilderness camps, and group homes that treat children with mental health diagnoses. State, federal, and other regulatory guidelines for each type of facility should be consulted for specific implementation requirements.

CONFLICT OF INTEREST

As a matter of policy, some of the authors of these practice parameters are in active clinical practice and may have received income related to treatments discussed in these parameters.

Some authors may be involved primarily in research or other academic endeavors and also may have received income related to treatments discussed in these parameters. To minimize the potential for these parameters to contain biased recommendations due to conflict of interest, the parameters were reviewed extensively by Work Group members, consultants, and Academy members; authors and reviewers were asked to base their recommendations on an objective evaluation of the available evidence; and authors and reviewers who believed that they might have a conflict of interest that would bias, or appear to bias, their work on these parameters were asked to notify the Academy.

SCIENTIFIC DATA AND CLINICAL CONSENSUS

Practice parameters are strategies for patient management, developed to assist clinicians in psychiatric decision-making. This parameter, based on evaluation of the scientific literature and relevant clinical consensus, describes generally accepted approaches to assess and treat specific disorders or to perform specific medical procedures. The validity of scientific findings was judged by design, sample selection and size, inclusion of comparison groups, generalizability, and agreement with other studies. Clinical consensus was determined through extensive review by the members of the Work Group on Quality Issues, child and adolescent psychiatry consultants with expertise in the content area, the entire Academy membership, and the Academy Assembly and Council.

These parameters are not intended to define the standard of care; nor should they be deemed inclusive of all proper methods of care or exclusive of other methods of care directed at obtaining the desired results. The ultimate judgment regarding the care of a particular patient must be made by the clinician in light of all the circumstances presented by the patient and his or her family, the diagnostic and treatment options available, and available resources. Given inevitable changes in scientific information and technology, these parameters will be reviewed periodically and updated when appropriate.

APPENDIX

PREVENTION OPPORTUNITIES IN THE PRACTICE AND MANAGEMENT OF AGGRESSIVE BEHAVIOR

Admission Screening (Via Phone or Face-to-Face Interview)

- Obtain information about aggressive behavior including patient's height, weight, frequency and type of behavior (e.g., assault, property damage, etc.), and legal involvement (e.g., probation, delayed prosecution, etc.).
- Determine, on the basis of history, whether the patient can be managed on the unit where he/she will be placed or

whether special precautions or referral to another facility is indicated.

- Identify the nature and goals of treatment, and estimate the treatment length to the child or adolescent and his/her legal guardian.
- Describe all types of restrictive interventions, including seclusion and restraint, to patient and his/her legal guardian, and obtain consent for their use if indicated.
- Obtain support of the patient's guardian, family, and other significant adults in the child/adolescent's life for the admission.

Introduction to the Clinical Service

- Review with the child or adolescent his/her history of aggressive behaviors and triggers and the unit expectations of the ways he/she is supposed to handle anger. This should also include answering questions about the use of seclusion and physical and chemical restraint.
- Seek agreement from the child or adolescent to follow service rules regarding anger management and cooperating in treatment, before allowing him/her to be introduced to peers on the service or allowing participation in service activities.
- Assess whether the child or adolescent needs special programming (i.e., 1:1, 15-minute checks, etc.) before allowing participation in service activities.

Practice Opportunities in Treatment Before a Crisis Occurs

- Anger management groups with daily practice sessions and role-plays focusing on the child or adolescent's triggers for anger and possible self-de-escalation strategies (e.g., self-initiated time-out, distracting oneself).
- Social skills group emphasizing safe boundaries and handling frustration.
- Involvement of family and, if involved, probation officer in supporting skills practice.

De-escalation Opportunities During a Crisis

- Remind the child or adolescent to use the anger management strategies that he/she has been practicing.
- Encourage the child or adolescent to separate himself/herself from the group and use a self-directed time-out.
- Remind the child or adolescent of consequences for not using self-control techniques.
- Use supplementary medications to treat underlying psychiatric illnesses.
- Use service's specific de-escalation program strategies.

Processing Opportunities After a Crisis

- For the child or adolescent: reviewing the triggers and options for behaviors that would have led to self-control and crisis resolution; interviewing injured peers/staff about their feel-

ings; performing restitution to the injured; daily practicing new skills that would help prevent similar triggers and similar crises.

- For the staff: review of the incident with respect to appropriateness, effectiveness, and future opportunities to help the child or adolescent avoid crises.
- Notification of legal guardians of any seclusion and restraint event and requesting input into treatment planning.
- For the risk manager and medical staff: review of prolonged seclusion or restraint, seclusion or restraint injuries, multiple seclusions or restraints with the same child or adolescent, increase of the use of seclusion or restraint procedures. Where indicated, subjecting these reviews to root-cause analysis with examination of common-cause and specific-cause variation with recommendations for changes in clinical approaches, programming, and/or staff education and training.

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