Introduction

Nationally, renewed attention to issues surrounding the use of restraints and seclusion began with a 1998 Hartford Courant series, “Deadly Restraint,” which reported on the restraint or seclusion related deaths of 142 individuals in the previous 10 years. Children accounted for more than 26% of those deaths (approximately twice the proportion they constitute in psychiatric institutions), which provided the impetus for new Federal law and HCFA regulations. The Hartford Courant reported that the 142 deaths were not truly reflective of the magnitude of the problem, as many states and the federal government do not monitor the use of restraint or seclusion or negative outcomes, such as death. Also, in most cases, the facilities where people later died usually attributed their deaths to other medical causes. The Hartford Courant series was followed by new HCFA regulations in 1999 and 2001, a congressionally commissioned survey which resulted in the General Accounting Office (GAO) 1999 report to Congress, “Improper Restraint or Seclusion Use Places People at Risk,” and the passage of the Child Health Act, Public Law No. 106-310 in 2000.

Federal Law and Regulations

In 1999, the Health Care Financing Administration (HCFA, now known as the Centers for Medicare and Medicaid Services, CMS) created new regulations regarding Patient’s Rights. Included in these rules are requirements regarding restraint and seclusion that must be met by all hospitals that participate in Medicare and Medicaid. The requirements affect both adult and child inpatient psychiatric units.

The Child Health Act, Public Law 106-310 was established in October, 2000. This law established national standards that restrict the use of restraint and seclusion in all psychiatric facilities that receive Federal funds and in “non-medical community-based facilities of children and youth.” To implement this law, two sets of regulations must be developed. One set, the 2001 HCFA Interim Final Rules on “Use of Restraint and Seclusion in Psychiatric Residential Treatment Facilities Providing Inpatient Psychiatric Services to Individuals under Age 21” are completed. This rule only applies to clients in residential facilities that are funded under Medicaid’s “Psychiatric Services Under 21” benefit. Currently, there are no children’s residential treatment programs in Minnesota which are funded under this provision. Therefore, in Minnesota, there are no facilities affected by these regulations.

The second set of regulations that would affect other group homes and residential facilities have not yet been promulgated.
Background

Improved rules about restraint and seclusion practices are based on the belief that “people have the right to be free from restraint or seclusion as a means of coercion, discipline, convenience, or retaliation”\(^1\) and that “restraint and seclusion are not treatment, but rather represent an emergency response to a treatment failure that resulted in an individual’s loss of control.”\(^2\) Because of this philosophical emphasis, the trends in regulation that community based programs may be subject to in the future include:

- Use of restraint and seclusion only during an emergency safety situation,
- Use of the least restrictive safety intervention, discontinued as soon as the emergency safety situation has ended,
- Refined definitions of what is and isn’t restraint or seclusion. For example, the new children’s rule indicates that time-out and physical escorts are not defined as seclusion or restraint while use of mechanical restraints is prohibited,
- Specific requirements on who can order restraint or seclusion, prohibiting standing orders, and limiting the time such orders can be in effect,
- Establishing time limits on the use of restraint and seclusion,
- Requiring face to face assessments within one hour after the restraint or seclusion is initiated,
- Specifying requirements for ongoing monitoring and debriefing sessions,
- Require notification of the family that restraint or seclusion has been utilized,
- More specific reporting requirements for deaths and injuries,
- Increased requirements for staff education and training.

The GAO report further identifies that restraint and seclusion can be dangerous not only for clients, but for staff. In one state, facilities with higher restraint and seclusion rates had higher rates of staff injury and lost staff time.\(^3\) The GAO report identified key elements in reducing the use of restraint and seclusion:

- A management philosophy that identifies restraint and seclusion as a last resort measure rather than a routine practice;
- A clear set of policies and procedures governing their use; requirements to report the use of restraint and seclusion as well as any deaths or injuries;
- Adequate staffing;
- Staff training on techniques of de-escalation and alternative techniques (differentiating those techniques suitable for children vs. adults);
- Proper application and removal of restraints;
- How to monitor individuals in restraint or seclusion.\(^4\)

In November 1998, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) published a Sentinel Event ALERT, entitled “Preventing Restraint Deaths,” [http://www.jcaho.org/about+us/news+letters/sentinel+event+alert/sea_8.htm](http://www.jcaho.org/about+us/news+letters/sentinel+event+alert/sea_8.htm) based on its review of 20 deaths of patients who were being physically restrained. Most of the deaths occurred in psychiatric hospitals. In 40% of the cases, the cause of death was asphyxiation. Asphyxiation was related to factors such as putting excessive weight on the back of the patient in a prone position; placing a towel or sheet over the patient’s head to protect against spitting

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1 HCFA Interim Final Rule on Seclusion and Restraint, July 1999.
2 "Improper Restraint or Seclusion Use Places People at Risk", United States General Accounting Office Report to Congressional Requesters, September 1999
3 Ibid.
4 Ibid.
or biting; or obstructing the airway when pulling the patient’s arms across the neck area. The remaining cases were caused by strangulation, cardiac arrest, or fire. All of the strangulation deaths were of geriatric patients who were placed in vest restraints. All of the deaths by fire were of male patients who were attempting to smoke or were using a cigarette lighter to burn off the restraint.\(^5\)

The JCAHO identified contributing factors in these deaths and made the following recommendations:

- Redouble efforts to reduce the use of physical restraint and therapeutic hold through the use of risk assessment and early intervention with less restrictive measures.
- Revise procedures for assessing the medical condition of psychiatric patients.
- Enhance staff orientation/education regarding alternatives to physical restraints and proper application of restraints or therapeutic holds.
- Consider age, sex and gender of patients when setting therapeutic hold policies.
- Revise staffing model to assure adequate staffing.
- Develop structured procedures for consistent application of restraints.
- Continuously observe any patient that is restrained.
- If a patient must be restrained in the supine position (face up), ensure that the head is free to rotate to the side and, when possible, the head of the bed is elevated to minimize the risk of aspiration.
- If a patient must be restrained in the prone position (face down), ensure that the airway is unobstructed at all times (for example, do not cover or “bury” the patient’s face). Also ensure that expansion of the patient’s lungs is not restricted by excessive pressure on the patient’s back (special caution is required for children, the elderly, and obese patients).
- Never place a towel, bag or other cover over the patient’s face as part of the therapeutic holding process.
- Do not restrain a patient in a bed with unprotected split side rails.
- Discontinue use of certain types of restraints, such as high vests and waist restraints.
- Ensure that all smoking materials are removed from patient’s access, including access from family and friends.\(^6\)

The 2001 HCFA (now CMS) regulations\(^7\) and the GAO report, make the following recommendations for staff education and training. Training should differentiate between techniques suitable for children and those for adults.

- Staff should be certified in Cardiopulmonary Resuscitation
- Techniques to identify staff and resident behaviors, events and environmental factors that trigger emergency safety situations.
- The use of nonphysical interventions (such as de-escalation, active listening, etc.) that can be used to prevent emergency safety interventions
- The proper application and removal of restraints and how to monitor individuals in restraint or seclusion.
- The appropriate frequency of offering food, drink, and an opportunity to use the bathroom.
- Physical signs that a client is in distress: skin color changes (especially lips or nail beds turning blue), breathing is irregular, gasping or gurgling, bulging neck veins, or the client tells you that they can’t breath.

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\(^6\) Ibid.

\(^7\) HCFA (now CMS) Interim Final Rule on Use of Restraint and Seclusion in Psychiatric Residential Treatment Facilities, January and May 2001 and Bazelon Center for Mental Health Law “Restraint Rules.
• Facility policy/procedures and regulatory requirements related to restraint and seclusion.
• Client risk factors for injury: obesity, respiratory conditions (asthma, COPD, pneumonia, URI), and sedation (which may reduce the gag reflex).

“It is now the professional consensus that the best way to reduce restraint deaths and injuries is to reduce restraint use to the greatest extent possible. Pennsylvania reduced restraint use by 90% in six years; staff and patient injury rates dropped by 74%. While the prevention of injury and death is sufficient motivation in itself to reduce restraint use, another motivation exists in liability case law. According to Susan Stefan, tort litigation, one response to death and serious injury in restraint, has become increasing successful in recent years. “Tort claims can involve a number of different causes of action: excessive force, medical malpractice, failure to protect, assault and battery, and failure to maintain a safe environment. In addition, the attempts of administrators to cover up deaths or injuries...have resulted in awards of over $1 million. Claims of constitutional violations were a common response to systemic overuse of seclusion and restraint, and are more likely to reemerge now that professional judgment in the field strongly supports significant reduction in the use of restraint...Lawyers are beginning to examine the application of the Americans with Disabilities Act to the use of restraint and seclusion...the use of restraint in violation of state and federal regulations constitutes ‘abuse’ under the statute creating protection and advocacy agencies...More recently, district attorneys have begun to criminally prosecute staff for manslaughter...in some deaths arising from misuse of restraints...”

Special Considerations

Other considerations are important for the clients of the Office of the Ombudsman for Mental Health and Mental Retardation. As mentioned above, studies of restraint deaths point to asphyxiation during the restraint process as a leading cause of death related to restraints. “Deaths that are not caused by asphyxia most often appear to be caused by a toxic interaction between restraint and medication in a variety of ways. Some psychotropic medications impair an individual’s gag reflex, making aspiration more likely...although the face down position makes asphyxiation more likely, the face-up position makes aspiration more likely. Other restraint deaths appear to be related to cardiac arrest. Psychotropic medications in general and many antidepressants in particular, have been associated with fast or uneven heartbeats leading to cardiac arrhythmias. Other drugs, such as clozapine, have been associated with cardiac arrhythmias during struggles and exertion, which frequently accompanies the use of restraints. The interaction of restraint and medications that are already in a patient’s system is dangerous enough; the addition of PRNs at the time of restraint can be even more dangerous, and literature has cautioned against it for almost 20 years...some anti-depressants, such as imipramine can cause metabolic problems if a person’s movement is restricted, which may lead to life-threatening hyperthermia...” The GAO report seconds this view. Clinicians have also postulated that potentially fatal cardiac arrhythmias can result from the combination of certain drugs and the adrenaline produced by an individual’s agitation. For example, a 48 year-old man in Texas was placed in a straitjacket and tied to a chair. He was found dead the next day (15 minute checks were required but not performed). The cause of death was listed as an overdose of imipramine. The restraints contributed to the death by affecting his ability to metabolize the medicine.

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8 Stefan, Susan, “Legal and Regulatory Aspects of Seclusion and Restraint in Mental Health Settings”, NETWORK, National Technical Assistance Center, Summer/Fall 2002.
9 Ibid.
10 Ibid.
Many women who are institutionalized because of psychiatric disabilities “…have histories of abuse in childhood. For these women, being surrounded by a group of people (often primarily men), having their limbs seized and lowered to the floor, and then being carried to a room where they are restrained with legs apart – often after their clothing is taken from them – can be extraordinarily re-traumatizing.”

“A facility can reduce episodes of restraints, without affecting duration of restraint once a client is restrained. Therefore, it is important to measure the duration of restraint as well as episodes of restraint. Crenshaw, Cain and Francis provide good benchmarks to aim for: hospitals in the lowest 10% of duration of restraint recorded .07-.09 hours spent in restraint per 1,000 patient hours…”

This Office offers consideration of the following issues, based on our experience:

1) Even though the process of being escorted to a time out or seclusion is not in itself considered restraint or seclusion, this Office has observed that it is a vulnerable time for clients and staff. A number of injuries have been reported during the process of being escorted. Strategies dealing with this vulnerable time should be included in staff training.

2) The Medical Review Subcommittee of this Office has reviewed several deaths that occurred suddenly and unexpectedly after the client had been restrained. Usually, there had been a violent struggle and no physical cause of death was determined by the autopsy. Death is possible in such circumstances from positional asphyxia where the movement of air is blocked, respiratory muscle fatigue/failure due to prolonged struggling, or cardiac failure secondary to stress.

3) This office would also like to encourage the careful use of PRN medications to control agitated behavior. Two commonly used medications for this purpose are Ativan and Haldol. Ativan has potential side effects of cardiac arrhythmia, apnea, tachycardia, low blood pressure, and EKG changes. If Ativan contributed to a restraint related death, it would be undetectable at autopsy. Haldol can cause akathisia (unusual body movements) that may sometimes be misinterpreted as increased agitation.

4) The use of aversive and deprivation procedures for DD clients are subject to specific requirements in Minnesota Rules.

This Office would like to emphasize the following about Rule 40 Programs:

- No criteria exist for when a Rule 40 Program must be initiated; the interdisciplinary team decides.
- A positive component must be in place.
- There is a specific requirement for review of each individual Rule 40 Program.
- Programs automatically expire every 90 days. Consent must be renewed on this schedule.
- Withholding normal goods and services is considered a deprivation procedure and should be addressed by the individual’s program.
- Rule 40 provides for the use of restraint in emergency situations. Beware of the “perpetual emergency.” If frequent emergency restraints are being used, then a Rule 40 program should be initiated.

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12 Stefan, Susan, “Legal and Regulatory Aspects of Seclusion and Restraint in Mental Health Settings, NETWORK, National Technical Assistance Center, Summer/Fall 2002.

13 Ibid.

14 Minnesota Rule 9525.2700, “Standards that govern the use of aversive and deprivation procedures with persons who have mental retardation or a related condition.”

http://www.revisor.leg.state.mn.us/arule/9525/2700.html
Case Study #1

A 20 year-old man with moderate mental retardation, pervasive developmental disorder, psychotic disorder NOS, and impulse control problems, sustained a cardiac arrest while being restrained. The night before the incident, he was upset and “ran” from the ICF-MR where he lived. It was suspected that he may have taken some drugs while away from the facility. Upon return by the police, he was still agitated and was given Haldol and Ativan. He then slept approximately 10 hours. When he awoke, he followed a female staff member into the snack room, closed the door and started “throwing her around the room.” He was then restrained, face down by 13 people for more than one hour. During the restraint he went limp so the staff stopped restraining him. He became agitated again so the restraint was resumed. He again went limp and was discovered to not be breathing, CPR was initiated and he was transferred to a hospital where he recovered.

Since this incident the facility has consulted with a Pharm D about the client’s medications, increased the number of male staff, sought consultation regarding this incident, and modified the client’s behavior plan so that he is not restrained again.

Risk factors for injury during restraint in this client include: the face down (prone) position, moderate obesity, the risk of CNS depression resulting from the possible drug use the night before coupled with the administration of Haldol and Ativan in a patient who routinely received Trazodone, Seroquel, and Depakote. The client also received high dose of Seroquel 600mg/day and Depakote 2000mg/day. In addition, Seroquel is to be used with caution in situations where core body temperatures may increase, a likely result in an individual struggling against restraint for over an hour.

Case Study #2

A 28-year-old man, with chronic paranoid schizophrenia, a history of polysubstance abuse, borderline intellectual functioning, chronic renal failure secondary to lithium, hypertension, hyperlipidemia, hypercholesterolemia, benign tachycardia, chronic back pain, and obesity, died while being carried to a seclusion room. On the day after an IM injection of Haldol decanoate 200 mg, the client began to appear agitated. In the past, his state-operated hospital staff had placed him in seclusion during these “spells.” The client was approached by staff and was asked to walk to the seclusion area. At first, the client appeared to comply, but then he began struggling with staff and bit one staff member. Many staff members responded to the emergency call for assistance, placed a towel over the client’s face, placed him in a carrying blanket, and carried him to the seclusion room. Upon arrival at the seclusion room, the client was discovered to be not breathing. Resuscitation was attempted, but the client was pronounced dead. An autopsy was performed. The manner of death was an accident, and the immediate cause of death was positional asphyxia during restraint.

Following the death of the client, the facility made multiple changes including assessing all clients for risk and vulnerability factors that may affect therapeutic intervention, moving clients to the side (off the stomach) as soon as possible during a takedown and restraint procedures, assigning one staff person to monitor the client’s breathing, inserting a mesh insert into the carrying blankets/emergency transport stretchers to facilitate breathing, and creating a seclusion room on the treatment unit.

Risk factors for injury or death in this client include: the face down (prone) position, obesity, hypertension, hyperlipidemia, history of benign tachycardia, and neuroleptic use (Haldol decanoate).
Case Study #3

A 42-year-old man with schizophrenia, mental retardation, chronic obstructive pulmonary disease, obesity, gastroesophageal reflux disease, first degree AV block (a heart arrhythmia), and other conditions, sustained a rib fracture during a restraint procedure at a state-operated facility. The client had physically threatened another client and was being transferred to a more secure unit. The client sustained the rib fracture during “physical intervention/takedown”. He was restrained prone (face down). During the transfer he became aggressive with staff. Velcro cuffs were applied and he walked to the new unit. Upon arrival he was placed on a “restraint board.” He complained of back pain. An x-ray done on the following day revealed the rib fracture.

After the incident, the facility indicated that new policies and procedures were being developed and that anyone medically at risk would not be placed in the prone position.

Risk factors for injury during restraint in this client include: the prone position, chronic obstructive pulmonary disease, obesity, client’s use of an inhaler, abnormal EKG, and Seroquel (as mentioned above in Case Study #1).

Resources:

Centers for Medicare and Medicaid Services  - CMS, formerly the Health Care Financing Administration, HCFA. http://cms.hhs.gov/


National Technical Assistance Center (see “Violence and Coercion in Mental Health Settings” – NETWORKS, Summer/Fall 2002) Features a series of articles the represent philosophical, clinical, neurobiological, legal/risk management, administrative, and personal arguments in favor of reducing the use of restraint and seclusion. http://www.nasmhpd.org/ntac. A long list of suggested readings and sources was listed within this document. They are as follows:


National Association of State Mental Health Program Directors (NASMHPD). (July 1999). Reducing the use of seclusion and restraint: Findings, strategies, and
recommendations. (March 2001). Reducing the use of seclusion and restraint, part II: Findings, principles, and recommendations for special needs populations. Alexandria, VA: NASMHPD.

National Association of State Mental Health Program Directors (NASMHPD): NASMHPD Research Institute, Inc. (NRI); and the National Technical Assistance Center for State Mental Health Planning. (July 1998). Responding to the behavioral healthcare issues of persons with histories of physical and sexual abuse. Alexandria, VA: NASMHPD.


Web Resources

American Academy of Child and Adolescent Psychiatry (AACAP): Presents issue briefs on the use of seclusion and restraint with children and adolescents and summarizes proposed legislation. Describes a variety of publications that address the use of coercion in the psychiatric treatment of children and adolescents. http://www.aacap.org


Judge David L. Bazelon Center for Mental Health Law: Provides current information on legislation and court decisions affecting the use of seclusion and restraint in psychiatric facilities. Includes an in-depth discussion of the use of advance directives in stating a consumer’s preferences during times of incapacity, including a series of advance directive templates. Also contains information on the proposed Patients’ Bill of Rights, Americans with Disabilities Act (ADA) and Olmstead v L. C. http://www.bazelon.org

National Alliance for the Mentally Ill (NAMI): The non-profit support and advocacy organization’s site features a position statement on seclusion and restraint as well as a chart that summarizes abuse of restraint usage across the country from Oct. 1998 (the month that The Hartford Courant story was published) through March 2000. http://www.nami.org


National Association of Protection and Advocacy Systems (NAPAS): Offers information on federally mandated Protection and Advocacy (P&A) programs that protect the right of
persons with disabilities, including psychiatric disabilities. Contains a special report on seclusion and restraint. http://www.protectionandadvocacy.com


National Association of State Mental Health Program Directors (NASMHPD): Features a position statement, legislative updates, and several free online publications including two NASMHPD Medical Directors’ special reports and an archive copy of the summer 1999 networks issue on reducing seclusion and restraint. http://www.nasmhpd.org

National Council for Community Behavioral Healthcare (NCCBH): Includes legislative information on the effort to reduce seclusion and restraint, as well as a variety of other public policy initiatives in the field of mental health. http://www.nccbh.org


Pennsylvania Department of Public Welfare: A wealth of information on this state’s efforts to drastically reduce seclusion and restraint usage includes data, charts, and exemplary state hospital guidelines. http://www.dpw.state.pa.us/omhsas/omhleadingway.asp