Restraint and Seclusion Practices and Policies in U.S. Forensic Psychiatric Hospitals

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Over the last 30 years, there have been significant efforts to reduce the use of restraint and seclusion in psychiatric hospitals. Although authors have previously described restraint policies and practices in general psychiatry settings across the United States, this study is the first to attempt to describe policies regarding those practices in forensic hospital settings. We review the history of restraint and seclusion use in the United States, placing it within an international context. We then describe the results of a national survey of state forensic services directors regarding restraint modalities and policies in forensic hospital facilities. Twenty-nine respondents representing 25 states completed the survey. The results indicate that physical holds are the most frequently available method of restraint and that restraint chairs are the least frequently available. Most respondents reported having a policy regulating the use of restraint in their facilities, most commonly at the institutional level.


Key words: forensic psychiatric hospital; restraint; seclusion

The management of unsafe behavior, primarily violence and self-harm, is one of the greatest challenges faced by inpatient psychiatric facilities. For decades, inpatient units relied heavily on the use of restraint and seclusion (R/S) to manage dangerous behavior and maintain patient safety, at times leading to significant abuses and patient harm. As a result, mental health care systems across the United States have endeavored in the past 30 years to reduce the use of R/S in inpatient units and to encourage the use of less restrictive means. R/S still occurs in most inpatient psychiatric facilities, but it is reserved as an option of last resort when all others have failed.

Although much has been written about R/S and strategies to reduce its use generally, the most recent scholarship exploring multistate R/S trends in state hospitals was published over 25 years ago. Even less has been written about the specific use of R/S in forensic settings. The American Academy of Psychiatry and the Law developed a resource document on R/S use in correctional mental health care, but this document does not address the unique environment of forensic psychiatric hospitals. Forensic units and hospitals, in addition to serving typical inpatient psychiatric functions, must be able to manage mandated treatment, reporting requirements to courts and other administrative bodies, and the enhanced security and safety needs of the facility and society. Forensic units and hospitals typically care for individuals who are ordered for restoration of competence to stand trial, and for insanity acquitees, individuals transferred from correctional facilities for evaluation or treatment, and civil patients who cannot be managed in general psychiatry environments. Despite the fact that these facilities serve this highly specialized population with potentially increased risk for violence and other dangerous behaviors, few publications have attempted to capture trends in R/S use in forensic settings.


Key words: forensic psychiatric hospital; restraint; seclusion
behavior, little has been published about R/S practices specific to forensic psychiatry hospital settings.

This manuscript describes the current U.S. national landscape regarding the availability of R/S modalities and policies governing their use in inpatient forensic psychiatric facilities. To provide context and background for understanding the current climate of R/S practices, we first briefly review the history of R/S practices in the United States, with a focus on policies and regulatory standards. We then describe the results of the first published national survey of state forensic mental health directors that provides a snapshot of current R/S modalities available in forensic hospital facilities and related R/S policies in each locale.

**Review of Literature on Restraint and Seclusion**

**Definitions of Restraint and Seclusion**

The Code of Federal Regulations (CFR, §482.13(e)) defines restraint and seclusion and outlines parameters for its use. According to CFR §482.13(e) (1) (i) a restraint is “(A) any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move his or her arms, legs, body, or head freely; or a drug or medication when it is used as a restriction to manage the patient’s behavior or restrict the patient’s freedom of movement and is not a standard treatment or dosage for the patient’s condition” (Ref. 9, p 10). The CFR defines seclusion as “the involuntary confinement of a patient alone in a room or area from which the patient is physically prevented from leaving” (Ref. 9, p 10). The CFR delineates that all patients have the right to be free from R/S when imposed as a means of “coercion, discipline, convenience, or retaliation” (Ref. 9, p 10), that R/S may be imposed only to ensure the immediate physical safety of the patient or others when other less restrictive interventions have been found to be ineffective, and that R/S must be discontinued as soon as it is safe to do so. Additional distinctions are made for R/S used for psychiatric purposes compared with restraint devices used for medical treatments or procedures and from postural supports or orthopedic devices used to support a patient’s mobility rather than to restrict movement. The CFR does not require states to develop their own R/S laws, but it does set the floor for hospitals’ R/S practices (i.e., state laws and hospital policies can be more protective of patients, but they cannot be less so).

The three primary restraint types are physical, chemical, and mechanical. Physical restraint typically refers to the manual holding of patients by staff using techniques in which they have been trained to restrict patients’ movement for safety purposes. Chemical restraint refers to the use of medication solely for the purpose of sedating patients or restricting their movement. Mechanical restraint involves the use of a device or apparatus to limit patients’ movement safely.

Several mechanical restraint devices have been implemented over time; the most common are restraint beds, chairs, and ambulatory restraints. Restraint beds are devices that leave the patient’s limbs strapped to a bed in a supine position and prevent the patient from getting out of the bed. Several restraint mechanisms can be employed using a restraint bed, including two- or four-point soft or hard limb restraints, bedside rails, body straps, mittens, and a net restraint. A restraint chair is any seat that prevents a patient from rising from the seat by the chair’s angle, the patient’s physical limitations, a seatbelt, a lap belt, a lap tray, or anything else that is not self-releasing. Ambulatory restraints, also known as preventive aggression devices, are two- or four-point soft or hard cuffs that restrain the patient while allowing them to walk and maintain some functionality. Ambulatory restraints were designed to reduce the length and frequency of seclusion or other more restrictive forms of mechanical restraint and to foster more therapeutic environments for patients struggling with behavioral control.

**Brief History of U.S. Policy and Changes**

In the 1982 decision of *Youngberg v. Romeo*, the U.S. Supreme Court balanced an individual’s right to freedom from bodily restraint with the state’s need to protect individuals from violence, stating, “We have established that Romeo retains liberty interests in safety and freedom from bodily restraint. Yet these interests are not absolute; indeed, to some extent, they are in conflict. In operating an institution such as Pennhurst, there are occasions in which it is necessary for the State to restrain the movement of residents – for example, to protect them as well as others from violence” (Ref. 14, p 319).

Congress, in the Americans with Disabilities Act (ADA) of 1990, required that individuals with disabilities be afforded the most integrated setting appropriate to the needs of the individual. In the *Olmstead v. L.C.* ruling of 1999, the U.S. Supreme Court interpreted the ADA to mean that psychiatric
treatment must be provided in the least restrictive setting. Although Olmstead and similar cases refer to the setting in which treatment is provided (e.g., inpatient versus community), the “least restrictive alternative” principle has been further applied to interventions within inpatient settings, such as psychotropic medication administration and R/S use.

Until the late 21st century, R/S use in psychiatric hospitals was not typically monitored or regulated at the national level. This started changing in 1998, when the Hartford Courant published an exposé that highlighted stories of multiple restraint-related injuries and deaths on inpatient psychiatric units. This series of articles triggered an intensive investigation into R/S practices and policies nationally by multiple regulatory agencies and a U.S. Senate subcommittee inquiry and hearing into restraint-related deaths. Notably, in 1999, the U.S. Government Accountability Office issued a report describing insufficient monitoring and reporting of national R/S data and outlined strategies for improvement. Over the next 20 years, numerous organizations released reports about R/S, created policies and regulations, and provided recommendations to reduce its use.

In 1999, The Joint Commission (TJC) published findings from a root-cause analysis on restraint-related deaths, concluding that these events were largely attributable to poor patient assessment and observation, inadequate training, insufficient staffing levels, and equipment failures. Following Congressional hearings on the matter that same year, the Health Care Financing Administration (now called the Center for Medicare and Medicaid Services (CMS)) issued a report requiring stricter standards for R/S use in residential facilities, and similar guidelines were released by the National Association of State Mental Health Program Directors (NASMHPD). In 2000, TJC released new standards for the utilization of R/S for behavioral health purposes. At the same time, the Children’s Health Act of 2000 (Public Law 106-310) established standards for the use of R/S in all public and private health care settings that receive federal funding, such as hospitals, psychiatric facilities, and nursing homes.

In the early 2000s, several other initiatives were launched that transformed the national R/S landscape. In 2003, the American Psychiatric Association, together with the American Psychiatric Nurses Association and the National Association of Psychiatric Health Systems, published a guide, *Learning from Each Other: Success Stories and Ideas for Reducing Restraint/Seclusion in Behavioral Health*, which contained suggestions for reducing R/S in psychiatric settings. In 2003, the Substance Abuse and Mental Health Services Administration (SAMHSA) and NASMHPD also convened a national summit, *A National Call to Action: Eliminating the Use of Seclusion and Restraints*, which led to the development of a national plan focused on six core strategies including training, data collection, guidelines, leadership, partnership, and rights protection. Following this summit, SAMHSA launched a grant program, the Alternatives to Restraints and Seclusion State Incentive Grant, to implement and evaluate best practices in preventing and reducing the use of R/S in mental health facilities. These three-year grants funded initiatives in 15 states, culminating in 2010 in a series of reports showing that most facilities had implemented SAMHSA’s six core strategies and had significantly reduced their R/S use.

As the United States gradually implemented policy changes related to R/S, so, too, did other countries. In December 2006, a major international milestone was reached when the United Nations issued the Convention on the Rights of Persons with Disabilities (CRPD). The CRPD prohibited the use of involuntary treatment in all forms, including involuntary hospitalization, medication, R/S, and substituted decision-making. According to the CRPD, several principles of humane treatment toward individuals with disabilities were violated by involuntary treatment, including Article 12 (equal recognition before the law), Article 14 (liberty and security of person), and Article 15 (freedom of torture or cruel, inhuman, and degrading treatment or punishment). Although the United States eventually became one of 94 signatory countries to the CRPD, several authors in the United States, United Kingdom, and Europe objected that the CRPD’s principles were unworkable and may set back progress for people with mental illness. Thus, the CRPD’s recommendations regarding involuntary treatment, including R/S, were not widely integrated into practice in the United States or United Kingdom. Both countries’ guidelines still permit some forms of R/S, although only as a last resort.

The CRPD did have some influence on R/S practice in the United States, however. Shortly after its publication, in 2007, CMS published new guidelines prohibiting the use of R/S as a punitive measure or
to restore order in a psychiatric unit, focusing instead on less restrictive interventions.\textsuperscript{36} In the same light, NASMHPD published a revised statement in 2006 stating that R/S is a safety intervention of last resort and not a treatment intervention.\textsuperscript{37} With the support of SAMHSA, NASMHPD developed a training curriculum based on public health prevention models of how to minimize and resolve conflict.\textsuperscript{27} In 2008, CMS published a revised guideline, adding a requirement for face-to-face examinations by a physician, nurse practitioner, or physician assistant within one hour of initiating R/S for patients, and TJC adopted similar requirements shortly thereafter.\textsuperscript{18,36} Although technically only applicable to those facilities receiving CMS funding or TJC accreditation (in which participation is voluntary, though highly financially incentivized), these policies had an enormous influence on the development of state law and hospital policy in the subsequent decade.\textsuperscript{38}

**Research on Restraint/Seclusion Use and Complications**

As national guidelines were developed regarding the appropriate use of R/S, scholarship exploring the benefits and drawbacks of particular restraint devices continued. During that period, the restraint chair was identified as a tool with potential advantages over other mechanical restraint modalities (e.g., four-point bed restraints), particularly related to enhancing the patient’s sense of control and dignity. Restraint chairs were originally developed for use as a modality of psychiatric treatment, but their use quickly fell out of favor in clinical settings.\textsuperscript{39,40} The chairs were used primarily as a law enforcement and correctional tool, and concerns were raised about inappropriate use as a form of punishment, prolonged use, lack of medical oversight, and inhumane treatment.\textsuperscript{41} Despite these concerns, authors noted that, when used as a medical intervention, restraint chairs offered specific benefits over other restraint modalities, including that the patient’s upright position reduces the risk for changes in oxygen saturation, allows for eye-to-eye contact with observing staff, and avoids the vulnerable supine position with splayed extremities, which may be retraumatizing for some patients.\textsuperscript{41} Empirical data about the use of restraint chairs are limited, though one study found it to be perceived by nurses as a safe and effective alternative to four-point bed restraints.\textsuperscript{42} Further, a recent three-hospital study found that, compared with four-point bed restraints, the use of restraint chairs was associated with shorter duration of restraint episodes, greater likelihood of the patient accepting oral (rather than injected intramuscular) medication, and fewer staff injuries.\textsuperscript{43}

Inherent in its designation as an intervention of last resort, R/S use poses multiple potential risks to patients, both physical and psychological. Physical complications of restraints include suffocation, aspiration, worsened agitation, injury, and increased mortality. Prone restraints increase the risk of suffocation, and supine restraints increase the risk of aspiration.\textsuperscript{19} Restraints of prolonged duration (greater than four hours) have been associated with an increased risk of deep vein thrombosis and pulmonary embolism, especially in patients with preexisting medical conditions.\textsuperscript{44} Restraint-related deaths are often attributable to asphyxiation, aspiration, or cardiac events.\textsuperscript{37} Psychological sequelae of R/S are also possible. One qualitative study found predominant feelings of trauma, shame, or guilt, as well as loss of dignity, self-respect, and autonomy in individuals who had been restrained.\textsuperscript{45}

Although U.S. law permits the use of R/S, opinions about its acceptability still vary widely across the country and internationally.\textsuperscript{46} Some authors go so far as to support entirely banning R/S, as exemplified by the Special Rapporteur to the Human Rights Council to the United Nations, who stated, “It is essential that an absolute ban on all coercive and nonconsensual measures, including restraint and solitary confinement of people with psychological or intellectual disabilities, should apply in all places of deprivation of liberty, including in psychiatric and social care institutions” (Ref. 47, p 13). This heterogeneity of opinion highlights the need for research to serve as a foundation for evidence-based standards to guide R/S practices.

**National Survey**

In 1984, the American Psychiatric Association Task Force on the Psychiatric Uses of Seclusion and Restraint conducted a survey of state psychiatric hospital directors from NASMHPD as a means to learn about policies, clinical concerns, and legal challenges to guidelines regarding restraint and seclusion.\textsuperscript{48} In this survey, NASMHPD directors from all 50 states were queried regarding their state’s regulations governing the utilization of R/S, including the existence of written guidelines and any clinical problems or legal challenges to such guidelines, and were asked to submit a copy of their written guidelines. Thirty-six
of the 50 states responded, with 23 states reporting state-wide regulations and 20 with both state-wide and individual institutional guidelines. Nineteen states had no definition for seclusion, and 23 had no definition for restraint. Nine states did not specify the indication for R/S, and only five states gave examples of devices used for restraining patients. The allowable time limit for R/S episodes ranged from one hour to one day; 24 hours was the modal response. Based on this survey, the task force concluded that there was significant heterogeneity regarding the presence, length, and specificity of R/S regulations in U.S. psychiatric care at that time.

To build upon this prior work and to better understand current national R/S practices specifically in forensic psychiatric units/hospitals, the authors of this report queried the NASMHPD Forensic Division LISTSERV.

**Methods**

The NASMHPD Forensic Division comprises those individuals selected by each U.S. state mental health commissioner to be directly responsible for and knowledgeable regarding the administration of state-operated forensic systems in their state. This group, primarily consisting of state forensic directors and assistant directors, was expected to be knowledgeable about R/S policies and practices in their state’s forensic facilities, given their roles in overseeing care delivery and reporting on quality metrics. The NASMHPD Forensic Division LISTSERV was queried on three separate occasions between May and July of 2021. Members who did not respond to the LISTSERV queries were emailed individually by one of the investigators to request and encourage participation.

The survey asked about R/S practices in inpatient forensic psychiatry units in the respondent’s state:

- what types of R/S modalities are available (options included seclusion, physical/manual restraint, and mechanical restraints using a bed, chair, or ambulatory restraint devices; chemical restraints were not included as they are considered substantively different than mechanical/physical/environmental interventions);
- whether each modality was available on all or only some of the forensic units in their state; and
- whether an institutional, regional, or state policy (or no policy) existed to govern the use of R/S in forensic inpatient settings. If policies existed, respondents were asked to share them with the investigators.

The authors used this methodology based on an expectation that centralized governmental agency oversight of state-run institutions would lead to intrastate consistency regarding policies and practices. To address participants’ concerns about publication of sensitive data regarding R/S practices, the authors agreed not to identify states by name in any data analyses. No protected health information was gathered during the study. See Appendix for survey details.

Data were de-identified and categorized before being analyzed in Microsoft Excel®. Because there was no protected health information included in the analyzed dataset, the project was exempted from review by the Institutional Review Boards (IRB) of Yale University and the Connecticut Department of Mental Health and Addiction Services.

**Results**

Representatives from all 50 states and the District of Columbia were surveyed. There were 38 initial responses to the survey request. Seven respondents only completed the consent section, and two additional respondents completed less than 50 percent of the survey. These respondents were excluded, leaving 29 survey responses for analysis (each completing at least 91% of the survey). These 29 respondents represented 25 states, with three states having multiple responses (two states each with two responses and one state with three responses). Multiple responses were possible for some states because several members of a state’s forensic leadership team were subscribed to the NAMSHPD LISTSERV. To ensure that each state was equally represented, only a single response for each state was included in the final analyses. For those states with multiple responses, the most inclusive or complete response was chosen. For those three states with more than one response, we compared the responses to help understand any intrastate differences. Only three states provided policies for review, resulting in a sample too small to be analyzed and from which to draw meaningful inferences.

Every respondent reported the availability of at least one restraint modality in their state. Physical hold was the most frequently available modality of restraint at 92 percent. Of those that reported the availability of physical holds, 96 percent reported having this restraint modality available in all the state’s forensic facilities. Seclusion was available in 84 percent of the reporting states. Bed restraints and ambulatory restraints were both available in 60
percent of the states. The least available restraint modality was the restraint chair, which was available in 44 percent of the reporting states. Respondents had the option of describing other means of physical or mechanical restraint, but no other means were reported. The average number of restraint types was 3.4 per respondent, with a mode of 3. In total, 11 different combinations of restraint types were reported by the 25 respondents, indicating significant heterogeneity among the states’ R/S practices. Table 1 summarizes these results.

Of the respondents to the survey, 92 percent reported having a policy delineating R/S use at either an institutional, state, or regional level (8% reported having no policy). The majority reported having only an institution-level policy (60%), while 20 percent reported having only a state-level policy. Fifteen percent reported having both state and institutional policies, and only one state (4%) reported having state, regional, and institutional policies (see Fig. 1).

In reviewing the three states with multiple responses for their state (anonymized as State A, B, and C), each response varied in some way from the alternate respondent from the same state. See Table 2 for detailed responses.

Discussion

The results of this brief survey represent the first published effort in 30 years to provide a snapshot in time of R/S modalities available in U.S. state hospitals and the first ever to focus specifically on forensic inpatient settings. The survey captured state forensic directors’ perceptions of R/S practice and demonstrated the heterogeneity across states. There was consistently high availability of physical holds and seclusion, while the availability of mechanical bed and mechanical ambulatory restraints was much lower and chair restraints the least available. All modalities except chair restraints were reported as being available in more than half of reporting states.

The essentially even split between restraint bed and restraint chair availability may reflect a growing trend in R/S practices nationally. These findings may reflect a trend away from beds and toward chair use, which would be consistent with the emerging literature demonstrating benefits of chair restraint use regarding duration of restraint, staff and patient injuries, and retraumatization.28,29 The availability of ambulatory restraints was high, even as their use has seemingly fallen out of favor in hospital settings. This finding may also reflect a misunderstanding of the survey question by respondents, who may have reported the use of ambulatory restraints by security personnel for transportation purposes50 rather than by mental health staff for clinical purposes (the authors’ intent). Even though this distinction was made explicit in the survey, the language used may have been insufficiently clarifying.

Our survey results, though limited by a lower response rate and no direct policy review, were consistent with the APA Task Force survey of 1984 in finding a lack of consistency in restraint modality application and policy development.48 Although federal guidance exists regarding implementation and development of R/S policies, these guidelines do not specify the level at which policies must exist (e.g., state versus regional), do not provide any recommendations regarding specific restraint modalities, and do not differentiate between

<table>
<thead>
<tr>
<th>Available Restraints</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>1</td>
</tr>
<tr>
<td>Two</td>
<td>13</td>
</tr>
<tr>
<td>Three</td>
<td>8</td>
</tr>
<tr>
<td>Four</td>
<td>2</td>
</tr>
<tr>
<td>Five</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1  Availability of Restraint Types (n = 25)

State, Institutional, and Regional Policies, 4%
State Policy Only, 20%
Both State and Institutional Policy, 0%
No Policy, 8%
Restraint and Seclusion in U.S. Forensic Psychiatric Hospitals

Table 2  Responses for States with Multiple Respondents

<table>
<thead>
<tr>
<th>ID</th>
<th>Which R/S modalities are used in your state?</th>
<th>Is the R/S modality identified below available in all or only some inpatient forensic units in your state?</th>
<th>Does a policy or guideline exist and, if so, at what level?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>PMH, S, MRC</td>
<td>All, All, All, All</td>
<td>Yes: Institutional and state</td>
</tr>
<tr>
<td>A2</td>
<td>PMH, S, MRC, AMR</td>
<td>All, Some, Some, All</td>
<td>Yes: Institutional</td>
</tr>
<tr>
<td>A3</td>
<td>PMH, S, MRC</td>
<td>All, Some, Some, All</td>
<td>Yes: Institutional and state</td>
</tr>
<tr>
<td>B1</td>
<td>PMH, S, MRC</td>
<td>All, Some, All, All</td>
<td>Yes: Institutional and state</td>
</tr>
<tr>
<td>B2</td>
<td>PMH, S, MRC</td>
<td>All, All, All, All</td>
<td>Yes: Institutional</td>
</tr>
<tr>
<td>C1</td>
<td>S</td>
<td>All</td>
<td>Yes: Institutional</td>
</tr>
<tr>
<td>C2</td>
<td>S, MRB, AMR</td>
<td>All, All, All, All</td>
<td>Yes: Institutional</td>
</tr>
</tbody>
</table>

Note. PMH, physical/manual hold; S, seclusion; MRB, mechanical restraint bed; MRC, mechanical restraint chair; AMR, ambulatory mechanical restraints.

Restraint and seclusion practices in U.S. psychiatric hospital settings have evolved over the past 30 years, gradually becoming more regulated and less commonly employed. One might hypothesize that R/S practices in forensic hospital settings, where aggressive and self-injurious acts are commonplace, would come under even greater scrutiny and be more heavily regulated than in general psychiatry settings. The authors’ review of the literature and the results of our brief survey indicate that this is not the case. Availability of R/S types in forensic hospital settings vary widely across jurisdictions, with relatively little guidance at the state or national level. Although the “least restrictive alternative” principle generally guides psychiatric inpatient treatment, its application to R/S remains largely a matter of institutional interpretation.

In the authors’ view, R/S use in forensic settings, with a specific focus on utilization rates by modality across states, should be studied further and discussed...
more openly among policymakers across the United States should share their forensic institutions’ policies and practices about R/S with each other so that they can benefit from one another’s experience. In addition to promoting best practices, such collaborative efforts can help to combat the culture of secrecy around R/S use and the sense of isolation that is common for individuals working in forensic settings, with the ultimate goal of developing national standards. Even with recent improvements, R/S remains among the most intrusive and potentially traumatic interventions that forensic facilities employ, and every effort should be made to develop and implement best practices. Providing high-quality patient care demands this time and attention.

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