

Children's Hospital and Health System

Patient Care Policy and Procedure

This policy applies to the following entity(s):

☒ Fox Valley Hospital ☒ Milwaukee Hospital ☒ Surgicenter

SUBJECT: Restraints - Use of

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DEFINITIONS

Chemical restraint: A drug or medication, or a combination, when it is used as a restriction to manage the patient's behavior, restrict the patient's freedom of movement, or to impair the patient's ability to appropriately interact with their surroundings – AND is not standard treatment or dosage for the patient's condition.

Comfort hold: hold techniques developed to help during a procedure. The purpose of the hold is for the child to feel safe and to help them keep still and calm.

De-escalation: The use of time, distance and relative position in combination with professional communication skills to stabilize a situation, gain compliance and/or reduce the immediacy of the threat posed by an individual.

Episode of Restraint: The time during which the patient meets restraint use criteria. If the patient was released from restraint and subsequently exhibits behavior that can only be handled by reapplication of restraint, this is a new episode, and a new order would be required. Trial releases are prohibited. Once a restraint is removed, that restraint episode ends.

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Restraints: Use of/Process Owner – CNS Population

Forensic Restraints: Handcuffs (and shackles) place by law enforcement.

Licensed Provider (“LP”): A practitioner permitted by law and the organization to provide care and services, without direction or supervision, within the scope of the individual's license and consistent with individually granted clinical privileges.

Non-Violent Restraint (: Restraint used to promote medical healing/treatment, when a patient attempts to interfere with their treatment (e.g. removes invasive lines, surgical bandages, etc.), or when patient assessment indicates the patient's developmental level does not allow them to follow directions related to their treatment.

Physical Escort: A “light” grasp to escort the patient to a desired location. If the patient can easily remove or escape the grasp this would not be considered a restraint. If the patient cannot easily remove or escape the grasp, this would be considered physical restraint, and all the requirements would apply.

Physical Hold (also known as manual hold): Holding a patient with intent to restrict the patient's movement against the patient's will is considered restraint. A staff member picking up, redirecting, or holding an infant, toddler, or preschool-aged child to comfort the patient is not considered restraint. See below for additional physical hold methods that are not considered restraint.

Restraint: Any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move their arms, legs, body, or head freely; or use of a drug or medication that is not a standard treatment or dosage for the patient's condition to manage behavior or restrict a patient's freedom of movement. See restraint exclusions below for exceptions.

Violent Restraint: Restraint used to stabilize a patient exhibiting violent or self-destructive behavior that jeopardizes the immediate physical safety of the patient, staff, or others and requires management.

Seclusion: The involuntary confinement of a patient alone in a room or area from which they are physically prevented from leaving to address violent or aggressive behavior. Seclusion is not used at Children's, even for violent or self-destructive behavior.

Temporary, Directly Supervised Release of Restraint (applies to non-violent restraints only): An occurrence for the purpose of caring for patient needs (e.g. toileting, feeding, or range of motion) and is not considered a discontinuation of restraint as long as the patient remains under constant direct staff supervision.

POLICY

All patients have the right to be free from any form of restraint that is not medically necessary or is used a method of coercion, discipline, convenience, or retaliation by staff. Restraint may only be imposed to ensure the immediate physical safety of the patient, a staff member, or others and must be discontinued at the earliest possible time. (Refer to CW Patient Care Policy: Rights and Responsibilities of Patient-Parent-Guardian-Family)

Use of restraints requires consideration of less restrictive alternatives and clear indications, as well as safe application, monitoring, and reassessment guidelines. Restraints may only be used when it is determined, based on assessment, that all alternatives and prevention interventions are ineffective to protect the patient or others.

The use of restraint must never be based on the patient's past behaviors or by the patient or family's request. Seclusion and chemical restraints are not used as methods of restraint at Children's.

Restraint Exclusions:

The intent of the health care team/provider, not the device itself, determines whether or not the items listed below are considered a restraint. This policy and procedure does not apply to:

- A. Devices used to maintain position, limit mobility or temporarily immobilize during routine physical examinations, tests, procedures, or treatments. Examples include but are not limited to:
 - Using side rails on a gurney while transporting patients
 - Papoose boards
 - Elbow immobilizers for positioning and arm boards for securement to maintain patency of a PIV are not considered a restraint
 - Using these devices to restrict mobility of a limb(s) or for other purposes, it would be considered a restraint.
- B. Mechanical support used to achieve proper body position, balance, or alignment to allow greater freedom of mobility or to permit participation in activities without the risk of physical harm (does not include a physical escort) than would be possible without the use of such support including:
 - Postural support
 - Orthopedic appliances
 - Protective helmets
 - Splint fabricated by Occupational Therapy
- C. Manually holding a patient to maintain position, limit mobility or temporarily immobilize during routine physical examinations, tests, procedures, or treatments. The patient is released when the examination, test, procedure, or treatment is complete. This is sometimes referred to as a "comfort hold". Examples include but are not limited to:

- Holding a child's arm still during IV placement
- Physically stabilizing a child's arms during NG placement

D. For general patient safety:

- Cribs, side rails, and safety belts (e.g., to protect the patient from falling out of bed versus preventing the patient from getting out of bed).
- Enclosure bed – to protect the patient from falling out of bed. If intended to restrain or restrict freedom of movement, non-violent restraint procedures apply. Enclosure beds may also be referred to as Posey Beds, Vail Beds, or mesh beds.

E. Forensic Restraints:

- Use of handcuffs (and shackles) by law enforcement officers is considered a constraint rather than restraint. Therefore, such use does not fall within hospital documentation standards for restraints.
- Refer to CHW Patient Care P&P: Patients with Law Enforcement Involvement.:
- Care providers may ask for the removal of the handcuff, shackle, or other device to provide care and treatment, however the ultimate decision to remove the law enforcement restrictive device lies with the law enforcement officer.

PROCEDURE

Key Concepts

A. Restraint Considerations

1. When considering both non-violent and violent restraint:
 - a. Restraint is initiated only when less restrictive interventions have been determined to be ineffective to protect the patient, a staff member, or others from harm.
 - i. Alternatives attempted or the rationale for not using alternatives must be documented.
 - b. Decision is based on the patient's needs in the immediate care environment and the interaction of the patient and staff with other patients in the environment.
 - c. The decision is not based solely on prior history of dangerous behavior. Current clinical justification must exist.
 - d. A request from a patient or family member for the application of a restraint is not sufficient justification for the use of restraint.

B. Least Restrictive Methods:

1. The use of restraint must be selected only when less restrictive measures have been judged to be ineffective to protect the patient or others from harm. When a

patient's behavior presents an immediate danger to themselves or others, immediate action is needed.

2. Alternatives attempted or the rationale for not using alternatives must be documented.
3. Examples of less restrictive methods may include:
 - a. Revising the clinical plan of care
 - b. Pharmacologic agitation management standard for treating the patient's condition
 - c. Using distraction or different behavioral interventions
 - d. Obtaining additional consultation (e.g. Child Life Specialist, Creative therapies, Behavioral Assessment Team, etc.).
 - e. Using a sitter or family member (see CHW Policy - Patient Sitter)
 - f. Implementing environmental modifications
 - g. A detailed list can also be found in the "Just in Time" teaching document for Managing Patient Behavioral events (PBE).

C. Orders:

1. Restraint orders are only permitted to be entered by the following providers: licensed physicians, residents/fellows with a Resident Educational License ("REL"), advanced practice nurse prescribers or physician assistants. Unlicensed residents and fellows are not permitted to enter restraint orders.
2. The order should be specific to start time, restraint type, extremity, reason for restraint.
3. Each episode of restraint (NV and Violent) requires a new order. Staff cannot discontinue then reinstitute restraint under the same order even if the time limit was not exceeded.
4. Reassessment and subsequent orders occur at a regular frequency. Refer to Appendix A.
5. A written order is not required in the EHR for discontinuation.

D. Initiation of Restraints

1. Initiation and removal of restraints may be done by staff who are trained and have demonstrated competency.
2. Trained staff may initiate an emergency application of restraint prior to obtaining an order from LP to protect the patient or others from an immediate threat of physical harm or disruption of treatment. An LP will be notified, and an order will be placed once safe to do so/immediately upon resolution of the emergency and/or achievement of patient safety.

E. Non-Violent Restraints

1. Criteria for Restraint Use
 - a. RN assesses and documents that the patient is at risk for at least one of the following criteria:
 - i. Removing invasive lines, surgical bandages, etc.
 - ii. Developmentally unable to remember and/or follow simple instructions.
 - iii. Disoriented to person, time, or place or agitated interfering with medical treatment/therapies.
2. Application of restraints:

- a. The trained staff may apply a non-violent restraint when application criteria are met.
- b. The LP will be contacted to obtain an order. Refer to [Appendix A](#) for more detail.
- c. Refer to [Appendix B](#) for restraint anchor locations on hospital bed.

F. Violent

1. Criteria for Restraint Use

- a. Behaviors that present or threaten an immediate risk of physical harm to self or others. These behaviors could include but are not limited to actively or attempting to self-harm, grab at others, hit, kick, bite, spit, throw objects or use an object as an improvised weapon.

2. Application of restraints:

- a. When criteria for use are present, trained staff may initiate violent restraints to ensure a safe environment for the patient and other staff. If LP is not at the bedside, they should be contacted as soon as possible of restraint event for order placement and face-to-face completion.

i. For manual holds as violent restraints:

- a) Trained staff may hold a patient in a safe manner until discontinuation criteria is met, and patient no longer exhibits dangerous behavior. This may occur for a brief time.
- b) A manual hold may be performed with two trained staff members or more depending on the level of aggression/behavior.
- c) To prevent positional asphyxia, staff should never lie across the patient's body (i.e. chest or pelvis) and should avoid facedown (prone) restraints.

ii. For mechanical restraints:

- a) A trained staff member will lead the application of mechanical restraints and may seek assistance from additional staff that are trained to safely apply the restraints to the bed and the patient.
- b) Refer to [Appendix B](#) for restraint anchor locations on hospital bed.
- c) After applying mechanical restraints, staff may:
 - Lower the bed to prevent tipping.
 - Raise the side rails.
 - Slightly elevate the head of the bed when possible

G. Assessment and Monitoring

The frequency of ongoing assessment and monitoring of the patient is based on type of restraint and criteria for use. Refer to Appendix A.

H. Patient/ Caregiver /Family Involvement & Education

- 1. Whenever appropriate and/or possible the parent/caregiver/family will be:
 - a. Involved in the initial assessment of the patient, including identification of

- successful behavioral techniques, methods, or alternative strategies.
 - b. Involved in the decision to utilize restraints.
 - c. Notified in the event of a restraint episode.
- 2. The RN educates and informs the patient/family and documents the following education provided in the EHR:
 - a. Reason for the restraint.
 - b. Alternatives to restraints that were attempted.
 - c. Assessment frequency (including comfort measures).
 - d. Changes in behavior or clinical condition to initiate the removal of restraints.

I. Discontinuation of Restraints

- 1. Occurs as soon as clinically indicated regardless of scheduled expiration of the order.
- 2. Emergent discontinuation of restraints:
 - a. If a patient's condition worsens to the point where emergent or lifesaving measures are required (i.e., Code Blue, seizing, vomiting) restraints should be discontinued immediately
- 3. Clinical indications may include but are not limited to:
 - a. Patient is no longer an immediate danger to self or others and condition has improved
 - b. If patient is asleep, they are not showing immediate danger to self or others
 - c. Patient can cooperate and participate in care
 - d. Least restrictive measures are available and effective
 - e. Patient no longer has tubes, drains or devices to maintain
- 4. Discontinuation of restraint is based on the ongoing assessment by the multidisciplinary team.
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- 5. The final decision to order/reorder/discontinue violent restraints rests with the LP.
- 6. A written order is not required in the EHR for discontinuation

J. Restraint Associated Death Reporting Responsibility

- 1. Children's Wisconsin Risk Management will report according to the Center for Medicare/Medicaid Services (CMS) standards around any death associated with the use of a restraint.
- 2. The Attending Physician (or designee) will report the death immediately to the medical examiner's office.
- 3. The patient care unit where the death occurred will report the death of a patient while a patient was in restraints or within 24 hours of restraints being removed immediately to Risk Management and enter an event report.
 - a. Risk Management will maintain an internal log of each death associated with the use of restraints per CMS death reporting requirements
 - i. This log shall be made available to CMS immediately upon

- request.
 - ii. Deaths must be entered into the log no later than seven days after the date of the death of the patient.
 - iii. Log information shall include: the patient's name; date of birth; date of death; name of attending physician or LP responsible for the care of the patient; the medical record number; and the primary diagnosis.
4. If the death is recorded in the CW internal log, the time and date the death was reported in the CW internal log must be documented in the patient's medical record.

Staff Training Requirements:

A. Applicable Staff

Staff having direct patient contact receive education and training in the proper and safe use of restraints, as described in Section B, Training Intervals. This includes Registered Nurses or qualified staff members which may include Nursing Assistants, Patient Safety Companions, Behavioral Health Technicians, and Public Safety Officers. Primary NICU staff do not require restraint competency.

By hospital policy, and in accordance with state law, health care providers who are authorized to order restraints (licensed physicians, residents/fellows with a REL, advanced practice nurse prescribers and physician assistants) must have a working knowledge of hospital policy regarding the use of restraints.

B. Training Intervals

Staff must be trained and able to demonstrate competency in the application, monitoring, assessment, and providing care for a patient in restraint:

1. As part of orientation
2. Before performing any restraint technique
3. Annually

C. Training Content

1. Nonphysical intervention skills
2. Least Restrictive Interventions
3. Restraint Types and Application
4. Discontinuation Indications
5. Monitoring
6. First Aid Techniques

D. Trainer Requirements

Individuals providing staff training must be qualified as evidenced by education, training and experience in techniques used to address patients' behaviors that necessitate the use of restraint.

E. Training Documentation

The hospital must document in the staff personnel records that the training and demonstration of competency were successfully completed.

References:

Regulations

Wisconsin Administrative Code, Chapter Med 8, N6 and N8 and Wisconsin Statutes, Chapter 441.

42 CFR Part 482 CMS Hospital Conditions of Participation: State Operations Manual Appendix A; eff. 02/21/20

TJC *Comprehensive Accreditation Manual for Hospitals, Provision of Care, Treatment and Services.*

Sherburne, E., Snethen, J. A., & Kelber, S. (2017). Safety profile of children in an enclosure bed. *Clinical Nurse Specialist*, 31(1), 36–44.
<https://doi.org/10.1097/nur.0000000000000261>

Hughett, B., & Copeland, K. (2022, February 4). *Strategies for caring for patients with aggressive behaviors*. Children's Hospital Association. Retrieved April 14, 2022, from <https://www.childrenshospitals.org/news/childrens-hospitals-today/2022/02/strategies-for-caring-for-patients-with-aggressive-behaviors>

Azeem M, Aujla A, Rammerth M, Binsfeld G, Jones RB. Effectiveness of six core strategies based on trauma informed care in reducing seclusions and restraints at a child and adolescent psychiatric hospital. *J Child Adolesc Psychiatr Nurs*. 2017 Nov;30(4):170-174. doi: 10.1111/jcap.12190. PMID: 30129244.

Dalton, E. M., Herndon, A. C., Cundiff, A., Fuchs, D. C., Hart, S., Hughie, A., Kreth, H. L., Morgan, K., Ried, A., Williams, D. J., & Johnson, D. P. (2021). Decreasing the use of restraints on children admitted for behavioral health conditions. *Pediatrics*, 148(1).
<https://doi.org/10.1542/peds.2020-003939>

Related Policies and Procedures

Behavioral Outbursts- Care of the Patient

Emergency Detention

Medical Staff Rules and Regulations

Patient Care Orders

Patient Sitter

Rights and Responsibilities

Security Risk

Violence in the Workplace

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Restraints: Use of/Process Owner – CNS Population

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Milwaukee Medical Executive Committee November 3, 2025
Surgicenter Medical Executive Committee December 18, 2025
Fox Valley Medical Executive Committee January 7, 2026

Appendix A

ORDERING, ASSESSMENT & MONITORING

	Non-Violent Restraint (Non-behavioral)	Violent Restraint (Behavioral)
Criteria	Utilization of a 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. Positive patient assessment for at least one of the following: • Removing invasive lines, surgical bandages, etc. • Developmentally unable to remember and/or follow simple instruction • Disoriented to person, time, or place or agitated interfering with medical treatment/therapies. • •	Patient is demonstrating behaviors that present or threaten an immediate risk of physical harm to self or others. These behaviors could include but are not limited to actively or attempting to self-harm, grab at others, or hit, kick, bite, spit, and throw objects or use an object as an improvised weapon. <i>Based on location staff can contact BERT/BAT/Public Safety (ThedaSecurity for FV) for assistance.</i> <i>Milwaukee: Dial 88 BERT: 62470</i> <i>Fox Valley: Dial 444 or hit panic button.</i> <i>Surgicenter: Dial 9-1-1 in the event of violent behavior that cannot be deescalated</i> Assigned RN is encouraged to notify Patient Care Manager/Supervisor/Charge nurse of patients in restraints for violent/self-destructive behavior.
Order Justification	• Medically necessary AND • Not used for punishment, coercion, discipline, retaliation, or convenience AND • Needed to improve the patient's well-being AND • Least restrictive interventions are attempted and/or considered to be ineffective	• Emergency situation to ensure physical safety of patient/self or others AND • Not used for punishment, coercion, discipline, retaliation, or convenience AND • Needed to improve the patient's well-being AND • Least restrictive interventions are attempted and/or considered to be ineffective

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Who May Order (Both Non-Violent & Violent Use)	- Licensed Providers: - Licensed physicians - Physician residents/fellows with a REL - Advance Practice Nurses & Physician's Assistants with prescriptive authority	
	Non-Violent Restraint (Non-behavioral)	Violent Restraint (Behavioral)
Initial Order	- Orders are time-limited (24 hours or less) - Order is placed as soon as possible after initiating restraint, with the time of the restraint being applied - PRN orders are prohibited If the initiation of restraint is based on a significant change in the patient's condition, the registered nurse immediately notifies the provider.	- Orders are time-limited, based on the patient's age: 4 hours for age 18 & older 2 hours for 9 to 17 1 hour for age 8 & younger - PRN orders are prohibited RN should obtain violent (behavioral) restraint order as soon as possible after initiation. If Attending Physician did not order the restraint they are notified as soon as possible by the resident or advanced practice provider team.
Each episode of restraint requires a new order. Staff cannot discontinue then reinstitute restraint under the same order even if the time limit was not exceeded.		

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Renewal Orders	• If restraint use is needed after initial order, a new order is placed with the appropriate time limits • After 24 hours provider must assess patient before placing the renewal order. • Renewal order is placed no less than once per calendar day.	Orders may be renewed according to the time limits (see above) for a maximum total of 24 hours. To support the goal of least restrictive environment, if/when violent restraints are required to be renewed, consider additional resources early such as Social Work, Case Management, Public Safety, Behavioral Assessment Team, Psychiatry consultation, Psychology services, and others deemed necessary to develop sustainable behavioral safety plan. If a child reaches the maximum limit of consecutive reordered violent restraints for 24 hours and has not yet reached discontinuation criteria, the LIP must evaluate the child face to face and place a new violent restraint order.
Face to face evaluation within 1 hour of intervention	No	Yes- LIP to complete at bedside Even if patient recovers and is released within that 1 hour Evaluation criteria: • Patient's immediate situation • Patient's reaction to the intervention • Patient's medical and behavioral condition • Need to continue or terminate the restraint
	Non-Violent Restraint (Non-behavioral)	Violent Restraint (Behavioral)
Subsequent Evaluations	Every 24 hours, a licensed physician or other authorized licensed independent practitioner sees and evaluates the patient before placing a new order.	
Restraint Initiation	• RN may apply restraint device for non-violent use. • Apply devices properly to maintain body alignment and patient comfort. • Keep the restraints clean and dry.	• Trained staff may utilize a manual hold in a safe manner until discontinuation criteria is met and patient no longer exhibits dangerous behavior. This may occur for a brief time period, such as walking to the room, or while advancing to the bed for mechanical restraints.

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Restraints: Use of/Process Owner – CNS Population

		• A manual hold may be done with 2 trained staff members or more depending on the level of aggression/behavior. • Public Safety generally leads the application of mechanical restraints and may seek assistance from bedside staff that are trained in restraint in order to safely apply the restraints to the bed and the patient safely.
	Non-Violent Restraint (Non-behavioral)	Violent Restraint (Behavioral)
Assessment (RN)	Initiation of Restraint • Length of order • Order obtained • Restraint type • Alternative strategies • Justification for restraint • Behavior requiring restraint • Family notification and education • Discontinuation criteria Every 2 hours • Visual check- current behavior • Circulation • Range of Motion • Fluids • Nutrition • Elimination/incontinence	Initiation of Restraint • Provider notification • Order obtained • Length of order • Appropriate restraint type • Alternative strategies • Justification for restraint • Discontinuation criteria • Family notification and education • Visual check- current behavior • Physical comfort- position • Circulation & skin integrity • Supportive interventions Every 15 minutes • Visual Check- current behavior • Physical comfort- position • Circulation • Skin integrity • Supportive interventions Every 2 hours (if applicable) • Range of Motion ("ROM") • Offer Fluids • Offer Nutrition

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		• Elimination/incontinence
Specific Monitoring	Continuous observation is recommended if significant motor agitation or restlessness occurs, or if the patient struggles against the restraint.	A patient in violent restraint(s) should have continuous observation of a trained staff member in case of any medical or psychological emergency. It may be appropriate for the patient condition for staff to only remain in visual observation to allow complete de-escalation. Patients with the following conditions may pose additional risk and should be monitored accordingly: • Epilepsy • Vomiting • History of physical abuse or neglect • Psychosis • Suicidality • Pregnancy

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Review of Documentation in Medical Record: (Both Non-Violent Restraint & Violent Restraint Use unless otherwise specified)	<u>Nursing Staff will document in the patient's medical record:</u> • Plan of Care • Modification made in plan of care • Restraint Flowsheet • Patients with behavioral challenges are advised to have the care plan "Risk for Behavioral Outbursts" in Milwaukee or "Restraint use Behavioral/Self Destructive Behavior" or "Restraint Use Non Behavioral /Non Destructive Behavior" in FV. <u>Licensed physician, physician residents/fellows with REL, advanced practice nurses and physicians' assistants with prescribing privileges document (any of the above and below):</u> • For Non-violent (Non-behavioral): Initial order and renewals, changes to plan of care • For Violent (behavioral): Initial order, face-to-face findings, and any subsequent evaluations, including changes to plan of care
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Restraints: Use of/Process Owner – CNS Population

Appendix B

Umano Bed Restraint Anchors (Umano Bed Guide)

Attachment Anchors for Restraint Straps

- The two mattress retainers on either side of the seat section (A)
- The rod at the center of the bed, under the patient sleep surface (B)
- The two mattress retainers on each side of the backrest section (C)
- The two mattress retainers on each side of the foot section (D)
- The two anchors under the mattress surface at foot end of the bed (E)
- The two anchors under the mattress surface at head end of the bed (F)

If possible, try to use location B instead of A. If this is not possible, you may use A, but should **ONLY** use the top portion.



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