

Ligature Risk Assessments

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From The Joint Commission *Sentinel Event Alert* #56*

- The rate of suicide is increasing in America.
- Now the 10th leading cause of death,² suicide claims more lives than traffic accidents and more than twice as many as homicides.
- At the point of care, providers often do not detect the suicidal thoughts of those who eventually die by suicide
 - Also known as *suicide ideation*
 - This includes children and adolescents
- Most of these receive health care services in the year prior to death, usually for reasons unrelated to suicide or mental health

* https://www.jointcommission.org/assets/1/18/SEA_56_Suicide.pdf

Suicide Risk Reduction

- Approximately 35,000 suicides occur each year in the United States
 - About 1800 (6%) are inpatient suicides
 - It is estimated that a Psychiatric Nurse will experience a completed suicide every 2.5 years
- In Psychiatric Hospitals, the most frequent method of suicide is hanging
 - 75% of inpatient suicides occur in patient's
 - Bathroom
 - Bedroom
 - Closet

Areas of Concern

- Ligature attachment points that pose a hanging risk from either
 - Sitting
 - Kneeling
- It only takes 4 or 5 minutes of adequate pressure on the carotid arteries in a persons neck to produce death by oxygen depravation to the brain
 - 15 minute rounding would be inadequate
 - Almost any article of clothing and any protruding object can be used
 - Risk assessing the built environment can minimize the ligature risk
- According to the Joint Commission *Sentinel Event Alert*:
“...there is no typical suicide victim.”

CMS Interpretive Guidelines §482.13(c)(2)

- *In order to provide care in a safe setting, hospitals must identify patients at risk for intentional harm to self or others, identify environmental safety risks for such patients, and provide education and training for staff and volunteers.*
- *The focus for a ligature “resistant” or ligature “free” environment is that of psychiatric units of acute care hospitals and psychiatric hospitals **and does not apply** to non-psychiatric units of acute care hospitals that provide care to those at risk of harm to self or others, for example:*
 - *emergency departments*
 - *intensive care units*
 - *medical-surgical units*
 - *other inpatient and outpatient locations.*

CMS: Identifying Patients at Risk

- *There are numerous models and versions of patient risk assessment tools available to identify patients at risk for harm to self or others.*
 - *No one size fits all tool is available*
 - *Therefore, the type of patient risk assessment tool used should be appropriate to the patient population, care setting and staff competency*
- *All hospitals are expected to implement a patient risk assessment strategy, but it is up to the hospital to implement the appropriate strategies.*

CMS: Environmental Safety Risks

- *Just as all hospitals must implement a patient risk assessment strategy, all hospitals must implement an environmental risk assessment strategy.*
- *Environmental risk assessment strategies may not be the same in all hospitals or hospital units.*
 - *The hospital must implement environmental risk assessment strategies appropriate to the specific care environment and patient population.*

CMS: Examples of Environmental Risk Assessment Tool

- *Ligature risks include but are not limited to:*
 - *hand rails*
 - *door knobs*
 - *door hinges*
 - *shower curtains*
 - *exposed plumbing/pipes*
 - *soap and paper towel dispensers on walls*
 - *power cords on medical equipment or call bell cords*
 - *light fixtures or projections from ceilings*

CMS: Examples of Environmental Risk Assessment Tool

- *Unattended items such as utility or housekeeping carts that contain hazardous items (mops, brooms, cleaning agents, hand sanitizer, etc.)*
- *Unsafe items brought to patients by visitors in locked psychiatric units of hospitals and psychiatric hospitals.*
- *Windows that can be opened or broken*
- *Unprotected lighting fixtures*
- *Inadequate staffing levels to provide appropriate patient observation and monitoring*

CMS: Ligature Points

- *A ligature risk (point) is defined as anything which could be used to attach a cord, rope, or other material for the purpose of hanging or strangulation.*
- *Ligature points include*
 - *Shower rails*
 - *Coat hooks*
 - *Pipes*
 - *Radiators*
 - *Bedsteads*
 - *Window and door frames*
 - *Ceiling fittings*
 - *Handles*
 - *Hinges and closures*

Ligature Risk and Ligature Resistant

- **Definition of a Ligature Risk:** A ligature risk (point) is defined as anything which could be used to attach a cord, rope, or other material for the purpose of hanging or strangulation.
 - Ligature points include shower rails, coat hooks, pipes, and radiators, bedsteads, window and door frames, ceiling fittings, handles, hinges and closures.
- **Ligature Resistant:** Without points where a cord, rope, bed sheet, or other fabric/material can be looped or tied to create a sustainable point of attachment that may result in self-harm or loss of life.

Inpatient Psychiatric Units Must be Ligature Resistant

- Ligature resistant must occur in the following areas:
 - Patient Rooms
 - Patient Bathrooms
 - Patient Corridors
 - Common patient care areas

NOTE: *In an inpatient psychiatric unit, nursing stations within an unobstructed view (so that a patient attempt at self-harm at nursing station would be easily seen and aborted) and areas behind self-locking doors will not be cited for ligature risks.*

CLARIFICATION: *This only applies to the nursing station itself (and staffed 24x7). Also, this does not allow for non-ligature resistant items to be allowed in sight of the nurses station*

Patient Room

- Ceilings
 - Cannot contain a drop ceiling
 - Per expert panel, no alternative solutions permitted
- Access panel
 - Installed with tamper-proof screws
 - Key-lockable
- Fire Sprinklers
 - Institutional type

Patient Room

■ HVAC Grilles

- Only with small perforations
 - National Institute of Corrections standards
- Existing grille types permissible
 - Cover with a heavy-gauge stainless steel screen fabric
 - Manufactured perforated cover
 - Secure individual fan/coil-type units

■ Electrical Outlets

- Hospital-grade, tamper-resistant
- GFCI
- Cover plates
 - Polycarbonate, with tamper-resistant screws in each corner
 - Stainless steel, with single tamper-resistant screw in the center

Patient Room

- **Pull Cords**

- Generally not required
 - Push button-type activation switches preferred
- If cords are utilized, they should be as lightweight as possible
 - No longer than 4”

- **Medical Gas Outlets**

- Normally not required
- If medically needed, they should be covered with lockable panels or panels attached with tamper-resistant screws
 - Some manufacturers have lockable covers
- Special care must be taken in semi-private

Patient Room

▪ Light Fixtures

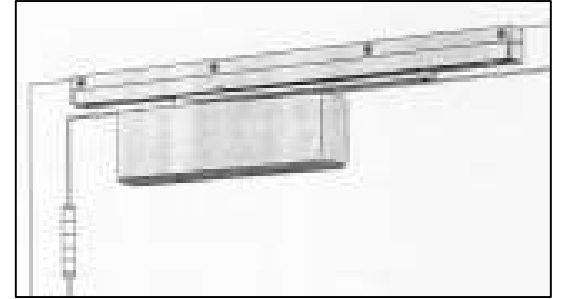
- Security-type fixtures
- Continued use of ceiling mounted fluorescent light fixtures
 - Covers are available for a more residential appearance
- General:
 - Round or oval-surface mounted
 - Vandal resistant
- Overbed
 - Recessed security downlights with polycarbonate lenses
- No glass components
- No table or desk lamps

Patient Room Doors

- Specifically between the patient room and the hallway
- Barricading
 - Double-acting continuous hinge
 - Door within a door
 - Separate narrower door
- Must contain ligature resistant hardware
- Hinges:
 - Continuous hinges are preferred
 - Closed slope top

Patient Room Doors

- Self-closing devices (if applicable)
 - Typically not required for patient room doors
 - If required, install on corridor side
 - Including spaces where patients may be alone
- Handles
 - Up, down, and over the door attachment risk
 - Locks (if applicable)
 - Latches



Patient Room Doors

Locksets with a Lever Handle

- Address up and down pressure
- Issues of transverse attachment
- Moves freely in both directions
- More of a risk than other types



Crescent Handle Lockset

- Meets ADA requirements
- Can be mounted in a horizontal position



Patient Room Beds

- In inpatient psychiatric units, in both psychiatric hospitals and general/acute care settings, careful assessment of the medical needs and risk for suicide of the patient are used to determine the appropriate type of patient bed utilized in addition to appropriate mitigation.
 - Also applies to general medical/acute inpatient settings.
 - Medical vs. Ligature Resistant Bed
 - Limit medical beds to only patients that meet the requirements
 - If there is a medical and ligature resistant need, a medical bed may be utilized with appropriate mitigation for the patient
 - Same concept for medical equipment
 - Educate staff on the risks within the room

Patient Room Other Furniture

- Sturdy furniture should be bolted to the floor or walls whenever possible
 - Withstand abuse
 - Not provide opportunities to hide contraband
 - Weapon
 - Open-front units with fixed shelves and no doors or drawers
 - Hooks - collapsible type
 - Lightweight desk chairs

Patient Room: Bathrooms

- Ceiling
 - Same as patient room
- Bathroom Doors
 - Doors specifically serving bathroom within the patient room
 - Must be without ligature attachment points
 - Door, hinges, handles, latching mechanism, locks (if applicable)
 - Pinch point when full sized door as concern
 - Soft suicide prevention door
 - Sentinel event reduction door
 - Removing the door



Patient Room: Bathrooms

■ Toilet Seats

- It is The Joint Commission's position that toilet seats are not a significant risk for suicide attempts or self-harm as determined through data collection and evidence based research.
 - Toilet seats are consistent with a ligature risk-free environment and we recommend that they not be cited during survey event.
 - They also are not required to be noted on a risk assessment.

Patient Room: Bathrooms

- Sink
 - Tops
 - Solid
 - Wall-hung, Sealed gaps
 - Fixtures Ligature Resistant
 - NO Exposed Plumbing
- Toilet
 - Floor mounted
 - Existing toilets can be modified
 - Enclosed plumbing
 - Tank lid: weapon risk



Patient Room: Bathrooms

As per The Joint Commission, quoting the Design Guide for the Behavioral Health Environment:

- Shower Curtains and Curtain Tracks –
 - *“No shower curtains or their tracks of any type (including those designated as “breakaway” and represented by their manufacturers as “safe for psychiatric hospitals”) are recommended for use in any patient-accessible areas, especially patient showers.”*

Patient Room: Bathrooms

- Shower Control Valves
 - Provide thermostatically limited hot water
 - Accidental or intentional scalding to
 - Single-knob mixing valves
 - Some also comply with ADA
 - “No-touch” valve
 - Complies with ADA
 - Allows patient to control temperature and flow
 - Replacement of valves with ligature resistant
 - One-piece shower assemblies that contain a shower head, push-button valves
 - ADA: Can provide a second head location 48 inches above the floor and a diverter valve

Patient Room: Bathrooms

- Shower Heads
 - Ligature-resistant, institutional type
 - Handicapped-accessible showers:
 - Handheld shower head
 - Ligature-resistant
 - Quick-disconnect fitting
 - Allows removal of head and attached hose when not in use
 - If a hook is provided to hold when not in use, it should be mounted to the removable portion
 - Another option is a cabinet to secure when not in use
 - Or Lower head at 48 inches from the floor

Patient Room: Bathrooms

- Towel Bars
 - Use collapsible hooks instead of towel bars
- Grab Bars
 - Enclosed
 - May be installed on a slight slope with one end cap higher
 - If the wall surface behind the bar is not smooth and flat utilize a pick-resistant sealant
- Dispensers
 - Toilet paper and Paper towel
 - Soap
 - Secure, Rounded, edges, slope, and appropriate material
 - Do not want to create a ligature point or a weapon

Seclusion Room

- No electrical outlets, switches, thermostats, blank cover plates, or similar devices
- No baseboards
- Observation mirror
 - Convex mirror with Level II-K-9 glass
 - Placed in upper corner of the room opposite of the entry door to the seclusion room
 - Needs to be visible from viewing window in the door
 - Gives staff 360-degree view prior to opening the door
 - Secure mounting so it cannot be used as a weapon
- Should only be a behavioral health care mattress on the floor *OR* a special seclusion room bed
 - Loops for mechanical restraints

Other Patient Care Areas Doors

- Corridor and Security Doors
 - Common Areas (including shared bathrooms)
 - Ligature resistant hardware
 - If common area door is self-locking and self-closing and continuously monitored by staff while occupied by patient(s) then interior hardware is not required to be ligature resistant
- Fire/Smoke Barrier Doors
 - Required by the Life Safety Code
 - Hardware must be rated for the door assembly
 - May not have ligature resistant options
 - At this time, risk assessment, determine appropriate mitigation strategies, and educate staff
 - Keep a current risk assessment

Other Patient Care Areas Ceilings

- Hallways and Common Patient Care Areas
 - Solid, monolithic ceiling preferred
 - Clips
 - Gluing
 - Motion-alarms
 - Height
 - Exceptions:
 - Common Patient Care Areas:
 - Door is self-locking and self-closing and space is continuously monitored by staff while occupied by patient(s).

Other Patient Care Areas Lighting

- If located at a height or location that is not easily accessible, may be normal fixtures and lamps
 - Observable by staff at a 24/7 nurses station
- Tamper resistant is preferred
 - Required where accessible by patients or not readily observable
 - If not tamper-resistant, minimum ¼ inch-thick poly carbonate prismatic lenses
 - Securely fixed
 - Tamper-resistant screws
 - Never use anywhere glass component is accessible to patients

Other Patient Care Areas

- Telephones
 - Stainless steel case
 - Securely mounted to wall
 - Non-removable shielded cord
 - Minimal length
 - Maximum 14 inches
 - Risk of armored cable if pulled out, it can be used as a weapon
- Cabinet Pulls
 - Recessed or ligature resistant

Other Patient Care Areas

- Fire Safety Equipment
 - Pull stations and fire extinguishers should be locked (approval by AHJ)
 - Staff must carry keys at all times
 - Recommended to be identified with a red plastic ring or other means for quick identification
 - Cabinets should have recessed pulls, continuous hinges, and polycarbonate glazing if view windows are utilized
- Exit Signs
 - Vandal-resistant
 - Installed tight to the ceiling with a full length mounting bracket
 - No wall mounting

According to The Joint Commission . . .

- It doesn't matter if the organization is using something that was sold as "ligature resistant".
- They need to do due diligence to ensure it meets our definition of ligature resistant, which is:
 - Without points where a cord, rope, bed sheet, or other fabric/material can be looped or tied to create a point of attachment that may result in self-harm or loss of life.
- Once ligature resistant devices are identified, the organization should still do a risk assessment to continue to mitigate risk

General/Acute Inpatient

General/Acute Inpatient Settings

- The general medical/surgical inpatient setting does not need to meet the same standards as an inpatient psychiatric unit to be a ligature-resistant environment
- Fixed ligature risks will not be cited on survey in these areas provided a risk assessment is completed and adjustments made
 - Nevertheless, all efforts should be done to make the environment as safe as possible
 - If a patient is admitted and found to have a high risk for suicide or self-harm, all objects that pose a risk for self harm that can be easily removed without adversely affecting the ability to deliver medical care should be removed
 - In addition, mitigating strategies (e.g. 1:1 monitoring) must be put into place and documented, including careful assessment of objects brought into the room by visitors
- Organizations should have policies, procedures, training, and monitoring systems in place to ensure these are done reliably.

General/Acute Inpatient Settings

- In both psychiatric hospitals and general/acute care settings, medical needs and the patients' risk for suicide should be carefully assessed and balanced to determine the optimal type of patient bed utilized to meet both medical and psychiatric needs
- Patients who require medical beds with ligature points must have appropriate mitigation plans.

General/Acute Settings & Emergency Department

General/Acute Inpatient Settings & Emergency Department

- The Joint Commission will cite ligature risk in a general/acute care inpatient setting and Emergency Department if the organization cannot demonstrate that all of the following are routinely and rigorously done:
 - Conducting a risk assessment for self-harm in the environment
 - Removing any items that could be used for self-harm
 - Training and competency-testing of staff as to how they would address a situation with a patient who is actively suicidal or threatening self-harm
 - Monitoring of bathroom use for a suicidal patient
 - Monitoring of the patient and monitoring of visitors
 - Having a protocol in place to have qualified staff accompany an actively suicidal patient from one area of the hospital to another.

NOTE for Emergency Departments

- At this time, The Joint Commission is not mandating the use of “*safe rooms*” within the Emergency Department but the organization must demonstrate where actively suicidal patients who move through the Emergency Department are housed until relocated (admitted or discharged) which includes the removal of any items that could be used for self-harm.

Actively Suicidal Patients

- Actively suicidal patients must be placed under demonstrably reliable monitoring (1-1 continuous monitoring, observations allowing for 360 degree viewing, continuously monitored video).
- The monitoring must be linked to the provision of immediate intervention by a qualified staff member when called for.
- The organization has a defined policy inclusive of this detail.

Scoring

Table From *Sentinel Event Alert 56*

Page 5

Joint Commission Requirements related to detecting and treating patients with suicidal ideation	Hospital	Ambulatory	Behavioral Health	Home Care	Nursing Care Center	Office-Based Surgery
Care, Treatment and Services						
CTS.02.01.01			✓			
Environment of Care						
EC.02.01.01			✓			
EC.02.06.01	✓					
National Patient Safety Goal						
NPSG.15.01.01, EP's 1 – 3	✓		✓			
Performance Improvement						
PI.01.01.01			✓			
Provision of Care, Treatment & Services						
PC.01.01.01, EP 24	✓					
PC.01.02.01	✓					
PC.01.02.13	✓					
PC.04.01.01	✓	✓		✓	✓	✓

Physical Environment Scoring

- EC.02.06.01 EP 1 Interior spaces meet the needs of the patient population and are safe and suitable to the care, treatment and services provided.
 - Ligature and self-harm risks
 - HAP - Regardless of identification in a risk assessment
 - Condition Level for BHC-HAP
 - Potential Accreditation with Follow-up Survey (AFS) for non-deemed depending on manner and degree
- EC.02.01.01 EP 1 Should only be scored if there is no risk assessment process.
- EC.02.01.01 EP 3 Should only be scored for lack of timely corrective action for organization identified risks in residential or outpatient settings

NPSG 15.01.01

- NPSG.15.01.01 Identify individuals at risk for suicide.
 - EP 1 Conduct a risk assessment that identifies specific characteristics of the individual served and environmental features that may increase or decrease the risk for suicide.
 - EP 2 Address the immediate safety needs and most appropriate setting for treatment of the individual served.
 - EP 3 When an individual at risk for suicide leaves the care of the organization, provide suicide prevention information (such as a crisis hotline) to the individual and his or her family.

NOTE: Scoring may vary depending on situation

LD.04.01.07

■ LD.04.01.07 EP1

- Leaders review and approve policies and procedures that guide and support patient care, treatment, and services.
 - Suicide Risk Assessment
 - Interventions/Level of Observation
 - Items to be removed (Inpatient Med/Surg or ED)

■ LD.04.01.07 EP2

- The hospital manages the implementation of policies and procedures

Staff Requirements

- Training
 - HR.01.04.01 Orientation
 - HR.01.05.03 Ongoing Education
 - Policies/Procedures
 - Suicidality
 - De-escalation
 - Environmental Risks
- Competency
 - HR.01.06.01
 - Suicide Risk Assessment
 - Interventions
 - Modifications to Environment

Immediate Threat to Life (ITL)

- Expedited decision of Preliminary Denial of Accreditation (PDA) issued by The Joint Commission president .
- PDA remains in effect until corrective action is validated during on-site follow-up survey.
- After corrective action is validated, organization's accreditation status will change to Accreditation with Follow-up Survey (AFS) to assess ongoing implementation of corrective action.
- What triggers ITL?
 - Situations that place patients, staff, or visitors at extreme danger
 - Almost always situational
 - Manner and Degree
 - Patient incident/history

Post Survey Process as per CMS

- *Regulations at §488.28 require that the deficiencies addressed in a Plan of Correction (PoC) be corrected within 60 days from receipt of the deficiency report*
- *Follow up surveys to verify correction of condition level deficiencies or the ability of the hospital to correct the ligature risk deficiencies, will be done according to the standards established by the surveying agency*
- *The ability of facilities to comply with the limited number of days allotted for the correction of ligature risks has proven to be burdensome based on a number of variables such as*
 - *the severity and scope of the deficiencies*
 - *the need to obtain governing body approval*
 - *capital budget funding requirements*
 - *engage in competitive bidding*
 - *availability of the required materials*
 - *time for completion of repairs*
 - *access to the unit/hospital areas.*

Post Survey Process as per CMS

- *Ligature risks are not eligible for life safety code (LSC) waivers as they are not LSC deficiencies*
- *Interim patient safety measures to mitigate identified ligature or safety risks may include*
 - *Continuous visual observation*
 - *1:1 observation in which a staff member is assigned to observe only one patient at all times to prevent harm directed toward self or others , including while the patient*
 - *Sleeps*
 - *Toilets*
 - *Bathes*
 - *other alternative nursing protocols recommended by the National Psychiatric Nursing Association (NPNA) at*
http://www.apna.org/files/public/Councils/PsychiatricNursingAvailabilityTool_021216.pdf

Post Survey Process as per CMS

- *Hospital requests for the extension of timeframes for the correction of ligature risk deficiencies must include*
 - *the hospital's accepted Ligature Plan of Correction (LPOC)*
 - *mitigation plan*
 - *an evaluation of the effectiveness of the mitigation plan*
 - *an update on the status of the LPOC*
- *The hospital request must also include a rationale for why it is not reasonable to meet the correction timeframe*

Post Survey Process as per CMS

- *Deemed hospitals submit the request electronically to their Accrediting Organization (AO)*
 - *Non-deemed hospitals submit the request electronically to the State Agencies (SA)*
- *If the AO or SA rejects the request for an extended timeframe for correction, the submission is returned to the hospital with a rationale for denial*
 - *If the SA or AO supports the request, the submission is forwarded electronically to the appropriate Regional Office (RO) or Central Office (CO), as appropriate, with a recommendation of approval*
 - *For deemed facilities, the AO will also copy the appropriate RO*
- *All request packages will be submitted electronically via designated RO and CO e-mailboxes*

Post Survey Process, The Joint Commission

- Ligature / Self-Harm Risks that result with a Condition Level will receive a Medicare Deficiency Follow-up Survey (CLD01 – MedDef)
- If not cleared at time of MedDef a Secondary MedDef will be scheduled (AFS08)
 - Removed
 - Resolved
 - Risk Assessed and Mitigated – where permitted only

Post Survey Process, The Joint Commission

- Approximately 1 week prior to the Secondary MedDef the Account Executive will contact the HCO to determine if all ligature / self-harm deficiencies will be resolved.
 - Yes – Secondary MedDef will occur
 - If additional findings or deficiencies are not cleared, MedDef process will start over (CLD01)
 - No – Secondary MedDef Postponed (Validation Survey)
 - Account Executive will provide the HCO:
 - Attestation Letter: acknowledging that they need additional time to resolve ligature / self-harm deficiencies
 - Due immediately
 - Ligature Plan of Correction / Monthly Update Form
 - Due within one week

Post Survey Process, Joint Commission: Ligature Plan of Correction

- Documentation of remaining RFIs and any additional HCO identified deficiencies, if applicable
- Scheduled completion date(s) for documented RFIs
- Temporary mitigation plan
- Ligature Plan of Correction
- Justification of Hardship
 - Submitted to SIG-Clinical and Engineering for review and approval
 - If rejected, a conference call will be coordinated to determine an acceptable Ligature Plan of Correction/Mitigation
 - Once approved, ESC will be accepted



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