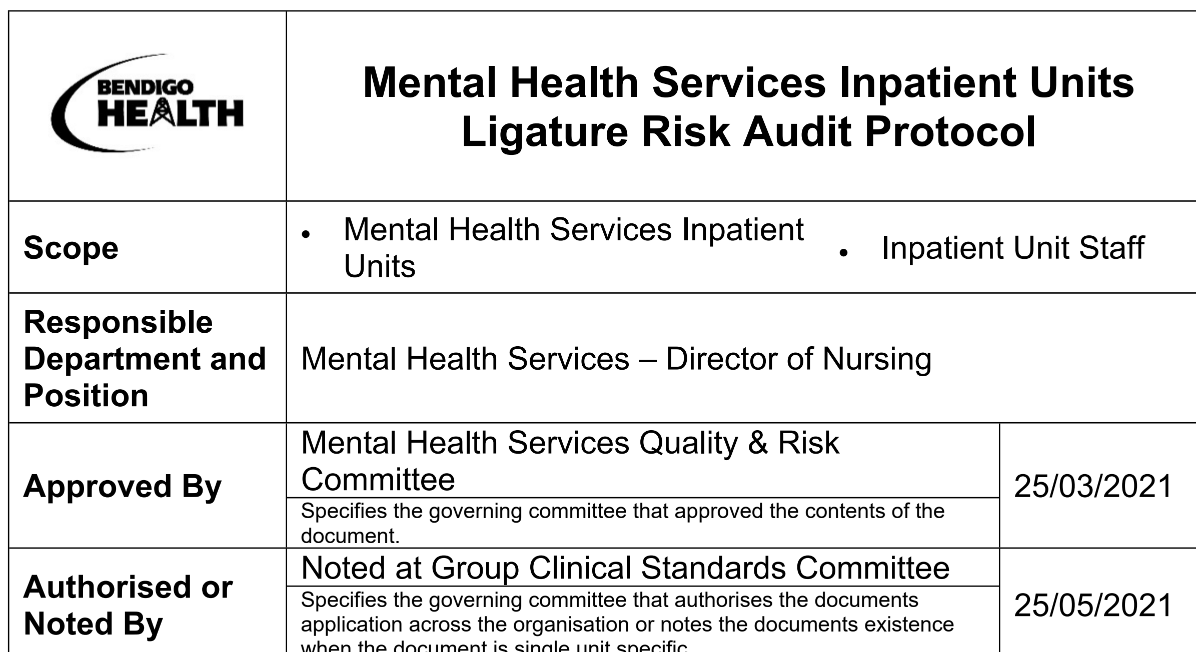


BENDIGO HEALTH	Mental Health Services Inpatient Units Ligature Risk Audit Protocol	
Scope	• Mental Health Services Inpatient Units • Inpatient Unit Staff	
Responsible Department and Position	Mental Health Services – Director of Nursing	
Approved By	Mental Health Services Quality & Risk Committee Specifies the governing committee that approved the contents of the document.	25/03/2021
Authorised or Noted By	Noted at Group Clinical Standards Committee Specifies the governing committee that authorises the documents application across the organisation or notes the documents existence when the document is single unit specific.	25/05/2021

PURPOSE

- The purpose of this protocol is to provide clinical staff with instruction on how to minimise the risk of injury / death from hanging in the Bendigo Health Mental Health Services (BHMHS) Inpatient Units through the implementation and action of ligature risk audits

- This assists Bendigo Health in meeting the "National safety priorities in mental health: a national plan for reducing harm 2007" Standards have identified reducing suicide and deliberate self-harm in mental health and related health care settings as a priority and states that likely ligature points in mental health service environments should be identified and managed, covered or removed.
- We recognise that not all ligature points will be foreseen and this protocol assists in Bendigo Health managing the balance between patient safety and patient's rights and dignity

POLICY

- BHMHS Inpatient Units will carry out an environmental audit of areas accessible to patients annually. In undertaking such work, due regard will be given to highlighting priority areas, (and prevailing circumstances) which present the highest ligature risks, including fixed equipment (e.g. cubical tracking), other equipment and pipe work in ceiling voids, and all potential risks in unsupervised areas, or where supervision is limited
- The outcome of the audit will result in a management and/or operational solutions (Manage Locally - e.g. improved risk analysis, increased staffing etc.) or physical solutions (Protect / Replace / Renew / Remove)

PROTOCOL

Arrangements for establishing and conducting audits of ligature risks

- The review team conducting the audit will include at a minimum:
  - at least one staff member from another clinical program, to offset the effects of overfamiliarity with the environment

- the Unit Manager, or representative, of the program being audited (to provide some familiarity with the environment and to ensure high risk points requiring immediate action are followed up)
- a staff representative the Occupational Health and Safety Department

- Auditing teams will be provided with the floor plan of each clinical area, including all areas to which patients have access, noting which of those areas has full, limited or no supervision
  Audit Teams will be expected to survey the entire clinical area (excluding those parts to which patients do not have access), to identify all potential or actual ligature risks. All these possible ligature points will then be recorded on the audit data sheets. Audit Teams will also be responsible for noting what actions may be necessary to address the identified hazard(s); Remove / Replace / Renew / Manage Locally. In surveying the clinical area, it is expected that where potentially dangerous items are observed the program representative will initiate actions to address the matter. These items may include personal effects or items such as plastic bags – refer to BH searches Protocol.
- Ligature audits will be completed annually, and following an audit the review team is able to initiate a meeting with the Service Director. This may involve a brief walk-around to visualise ligature risks identified in order to assist in fast tracking/approving budget to action works to reduce risks identified

Applying the ligature risks audit tool – general principles

Step 1

Allocations of roles are undertaken

- **Lead**: the lead will coordinate the process of the audit (at times the lead may also act as the scribe)
- **Observer(s)**: visually identify all points that could be used to attach a ligature to which would be likely to sustain the weight of a person (approx. 50kg) to be completed in a systematic manner. Due regard will be given to highlighting priority areas (and prevailing circumstances) which present the highest ligature risks
- **Scribe**: to note all possible ligature points in the approved audit template, they can also be marked on the units floor plan
- **Guide**: a person working on the unit who can clarify the usage and observational requirements for each room / area reviewed. They also provide local area knowledge when discussing with patients the access required to their bedrooms during the audit

Step 2

Unit / Floor Plan

The Floor Plan of the unit will be available to the audit team prior to the inspection walk around. Using the floor plan, review the existing room allocation and determine if all areas are: Unobserved / Partially Observed / Well Observed

Step 3

Walk through the Unit commences using a structured and systematic approach:

- Identify a starting point in a room
- From the starting point working **left to right**, **up and down**, identify all actual or potential ligature points that can be seen

- Using the Ligature Point Rating Matrix determine the rating of the ligature point

Step 4
The Audit outcomes will be documented on the approved BHMHS Audit template, after which:

- All high risk points identified are followed up by the Unit Manger
- When required, a follow up meeting / walk around with the Service Director is organised to visualise ligature points identified as requiring Removal / Renewal / Repair / Protection with a considerable budgetary requirement or structural change/impact
- Present the completed audit to Quality and Risk Committee

Step 5

1. Audit outcomes that require further action are to be followed up by the Unit Manager. It is acknowledged that there will be some risks, that further evaluation will be required by specialist knowledge and advice from the engineering department (or specialist contractor). An initial assessment of the risk should still be made on the audit data sheet.

Room Rating

Rooms are allocated in the template, if this is a repeat audit they will have been previously populated following the direction arrows on the floor plan.

Room Designation Rating –. It provides scoring for the types of rooms that are often found on the Units. Additional rooms can be added, but should be discussed by the whole team as to which rating would apply at the point of review.

Each room in the clinical area will be given its own rating. This rating will depend upon the amount of time most patients will spend in a particular room, without direct supervision from staff, or those patients who have "unobserved opportunity". For example, most patients will spend periods of time unsupervised in their bedroom, or in the shower/bathroom.
The rating is an assessment of opportunity a patient could have to use a ligature point.

Auditing teams are expected to rate the room designation according to usual staff supervision practices in the clinical area being audited. The ratings are split between three groups (A, B and C) as follows:

- Room Designation Rating **"3"** – where most patients spend time, in private, without direct supervision by staff
- Room Designation Rating **"2"** – where most patients spend time with minimum direct supervision by staff and are usually in the company of peers
- Room Designation Rating **"1"** – applicable to areas where there is traffic from staff and patients moving through, or areas which are closed to patients other than when they are being directly supervised

A - Where most patients spend time, in private, without direct supervision by staff	**B - Where most patients spend time with minimum direct supervision by staff and are usually in the company of peers**	**C - Applicable to areas where there is traffic from staff and patients moving through, or areas which are closed to patients other than when they are being directly supervised**
All Bedrooms	Day Rooms	General Circulation spaces
Toilet Areas	Dining Rooms	Corridors
Shower/Bathroom Areas	Unlocked Therapy rooms	Locked Rooms
Quiet Rooms	Unlocked Offices	
Isolated areas of the unit	Unlocked Store Rooms	
Parenting Visiting Rooms	Unlocked Utility Rooms	
	Unlocked Kitchens	
	Courtyards	
3	**2**	**1**

Patient Profile Rating

High Risk Patient Group Rating	Medium Risk Patient Group Rating	Low Risk Patient Group Rating
Patients with acute severe mental illness	Patients with chronic enduring mental health problems	Patients in self care groups
Patients who are unpredictable	Patients who are susceptible to periodic relapses, or subacute episodes	Patients in rehabilitation
Patients who are depressed	Patients who are not symptom free(having delusions, hallucinations)	Patients who have never been assessed at being at risk of suicide
Patients who are, or have been at high risk of suicide, or sever self harm	Patients who have been assessed as NOT being at immediate risk of suicide	
Patients in initial recovery stage following suicide risk, or on 1:1 observations		
Young People		
Patients with Challenging behaviour		
Patients with chaotic behaviour		
Patients with concurrent substance misuse issues		
Patients with concurrent severe social needs (marital / family breakup- financial concerns)		
3	2	1

Ligature Point Rating

As well as noting all identified actual or potential ligature points, Audit Teams will also be responsible for noting what actions may be necessary to address the identified hazard(s) e.g. removal of the hazard, the "engineering out" of the hazard or, following local agreement, managing the risk through a change in operational practice.

When a ligature point has been identified, the details should be noted on the audit sheets.

All sections should be completed, including (where appropriate) the section headed "recommended/remedial action".

For each ligature point consider likelihood and impact and determine the overall risk factor and record on the template determining and prioritising ligature risks.

This process will result in an overall score being assigned to all ligature risks, which can then be ranked in priority order, in terms of "degree of risk" posed by each ligature point in a particular place (and associated with a particular set of prevailing circumstances).

The audit form also carries additional information in relation to a recommended course of action which may be required of Managers, and their staff, such as "managing" (operationally) an identified risk.

4 meter or above	2 meter- 4 meters	1 meter – 2 meters	Below 1 meter
Access to ligature points at or above 4 meters are unlikely to be reached without the aid of steps or a ladder	This is the most likely room height within which patients could access ligature points and therefore attracts the highest risk rating and score.	Ligature points which may be present in this height range present a medium risk.	Low Risk
1	**3**	**2**	**1**

Compensatory Factors

Compensation Factors include elements and situations, which would cause an identified ligature point to remain as a high or low risk, providing certain physical or operational criteria were sustained.

In this regard, a Compensating Factor must be common practice, or relate to the design of the room and must be permanent.

> *For example, a patient on special observations, whilst in their bedroom at the time of the audit will not count as a Compensating Factor because this is a temporary clinical management strategy and not a permanent or consistent element. In order to qualify as a Compensating Factor, the item must be either a **design element** (e.g. one which allows for good observation) or be part of an **established procedure** (e.g. general observation practices of staff) or design of equipment.*

Elements of moderation should then be taken into account in determining the priority of risk.

A- High risk Remains	B- Medium Risk Remains	C- Medium Risk Remains	D- Medium – low risk
Limited Observation due to poor design	Good observation through good design	Limited Observation due to poor design	Good observation through good design
Limited numbers of staff	Limited staff	Good staff levels/ skill mix	Good staff levels/ skill mix
Poor culture of risk management amongst staff team	Reasonable culture of risk management amongst staff team	Reasonable culture of risk management amongst staff team	Positive culture of risk management amongst staff team
Low level of commitment to staff training and support in managing risk	Commitment to staff training but low staffing levels conflict with its delivery.	Commitment to staff training and support in managing risk	Commitment to staff training and support in managing risk
3	**2**	**2**	**1**

Recommended course of action

- Once all ligature risks are identified the Audit Teams are to assign a "recommended course of action" for all identified ligature risks in accordance with the descriptions given below

Recommended Course of Action	Description / Definition
Remove	The risk is deemed to be of such a nature that to leave it would put the patients at risk. The ligature point needs to be removed and the surface finishes made good, as the item is no longer needed, or there is no suitable alternative
Remove & Replace	The risk is deemed to be of such a nature that to leave it would put the patients at risk. The ligature point is removed and replaced with a "purpose-designed" similar anti-ligature piece of equipment (or materials)
Remove & Renew	The risk is deemed to be of such a nature that to leave it would put the patients at risk. The ligature point is removed and new alternative equipment or materials are installed
Protect	A technical solution is required to hide the potential ligature point
Managed Locally	The ligature point is of a nature that the Audit Team, supported by the Service Managers assessment that it is unnecessary to remove it **OR** There is no technical solution to the problem, for example, door hinges **OR** There is a need to acknowledge (and retain) the risk because the risk of another potential injury is greater if it is removed, than that associated with a ligature risk, for example, grab rails within an elderly patient's toilet

Scoring for Aggregate Scores

All the ratings are added together : Room Designation score X Patient profile X Ligature point rating X compensation factors= Aggregate Score					
Example	Room Rating	**X (times)** Patient profile rating	**X** Ligature Point rating	**X** Compensatory factors	**=** Aggregated Score
Bedroom 1	1 X	3X	2X	X 1	= 6
Bedroom 2	3X	3X	10X	x2	= 180

1x3x2x1=6

3x3x10x2=180

Outcomes

The outcome of the audit will result in management and or operational solutions (e.g. improved risk analysis, increased staffing etc.) or physical solutions which may need to be funded. The subsequent inspection with executive directors is aimed to assist in supporting managers in actioning/prioritising/authorising works where funding is required.

A Ligature Risk management plan will then be developed for and the plan will be monitored and endorsed monthly by the Quality and Risk Committee.

REFERENCES and ASSOCIATED DOCUMENTS

Bendigo Health Policies and Protocols

Searches of Patient's and Visitor's in Psychiatry Inpatient and Residential Units Protocol

Standards / Codes of Practice / Industry Guidelines

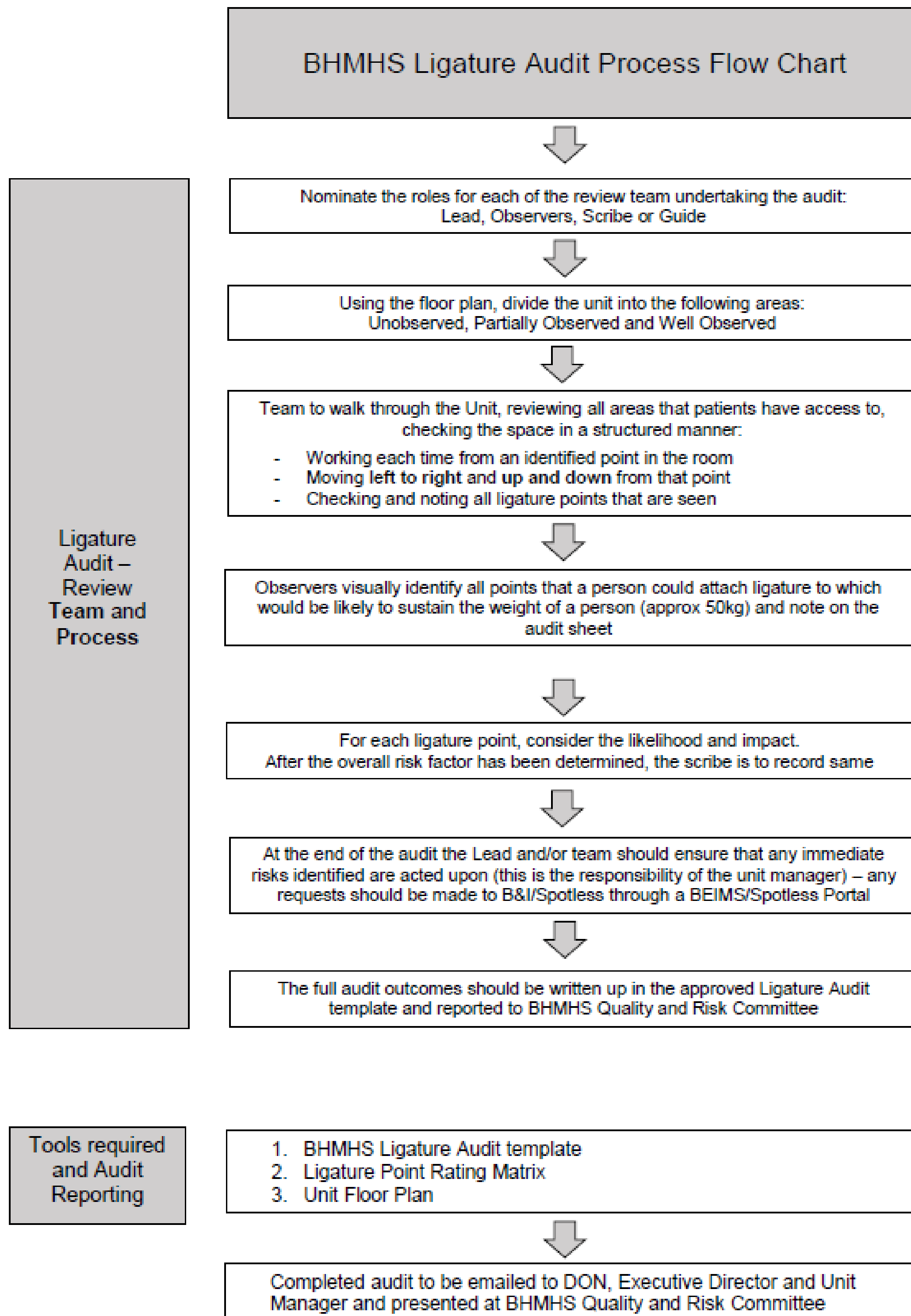
- *National safety priorities in mental health: a national plan for reducing harm.* 2007. Department of Health and Ageing, Australian Government. National safety priorities in mental health: a national plan for reducing harm.

MANDATORY INCLUSION

Personal information and health information as defined in the relevant Victorian law, which is required to be collected, used, disclosed and stored by BHCG in order to achieve the Purpose of this policy, will be handled by the Group and its employees in accordance with their legal obligations.

When developing this policy, BHCG has taken all reasonable steps to make its content consistent with the proper discharge of its obligations under the Charter of Human Rights and Responsibilities Act 2006.

Appendix A



Appendix B Rating Matrix

<table>
<tr><td rowspan="2">Ligature Point Rating</td><td colspan="2">Rating</td><td>3</td><td colspan="2">2</td><td>1</td></tr>
<tr><td colspan="2">Description</td><td>2 – 3 meters - This is the most likely room height within which patients could access ligature points and therefore attracts the highest risk rating and score.</td><td colspan="2">1 - 2metres - Ligature points which may be present in this height range present a medium risk.</td><td>Below 1 metre - Low Risk
3 - 4 metres or above - Access to ligature points at or above 4 meters are unlikely to be reached without the aid of steps or a ladder</td></tr>
<tr><td rowspan="2">Room Designation Rating</td><td colspan="2">Rating</td><td>3</td><td colspan="2">2</td><td>1</td></tr>
<tr><td colspan="2">Description</td><td>Where most patients spend periods of time in private, without direct supervision by staff:
- All Bedrooms
- Areas – toilets, shower / bathroom
- Single Sex sitting rooms
- Isolated areas of the ward</td><td colspan="2">Where most patients spend long periods of time with minimum direct supervision by staff and are usually in the company of peers
- Rooms – day / dining
- Unlocked rooms - therapy / offices / store rooms / utility rooms / kitchens</td><td>Applicable to areas where there is traffic from staff and patients moving through, or areas which are closed to patients other than when they are being directly supervised
- General circulation spaces
- Corridors
- Locked rooms</td></tr>
<tr><td rowspan="2">Patient Group Profile Rating</td><td colspan="2">Rating</td><td>3</td><td colspan="2">2</td><td>1</td></tr>
<tr><td colspan="2">Description</td><td>Patients WITH:
- acute severe mental illness
- unpredictable behaviour
- challenging behaviour
- chaotic behaviour
- concurrent substance misuse issues
- concurrent severe social needs (marital / family breakup- financial concerns)
Patients WHO are:
- depressed
- or have been, at high risk of suicide, or sever self-harm
- in initial recovery stage following suicide risk, or on 1:1 observations
- young</td><td colspan="2">Patients
- with chronic enduring mental health problems
- who are susceptible to periodic relapses, or subacute episodes
- who are not symptom free(having delusions, hallucinations)
- who have been assessed as NOT being at immediate risk of suicide</td><td>Patients
- in self-care groups
- in rehabilitation
- who have never been assessed at being at risk of suicide</td></tr>
<tr><td rowspan="5">Compensatory Factors</td><td colspan="2">Rating</td><td>3</td><td colspan="2">2</td><td>1</td></tr>
<tr><td rowspan="4">Description</td><td>Observation</td><td>Limited due to poor design</td><td>Good through good design</td><td>Limited due to poor design</td><td>Good through good design</td></tr>
<tr><td>Staffing</td><td>Limited numbers of staff</td><td>Limited staff</td><td>Good staff levels/ skill mix</td><td>Good staff levels/ skill mix</td></tr>
<tr><td>Culture of risk management amongst staff team</td><td>Poor</td><td>Reasonable</td><td>Reasonable</td><td>Positive</td></tr>
<tr><td>Commitment to staff training and support in managing risk</td><td>Low level</td><td>Commitment BUT low staffing levels conflict with its delivery</td><td>Commitment</td><td>Commitment</td></tr>
</table>

Scoring for the Aggregated Score – Ligature point rating *multiplied by* room rating *multiplied by* patient group profile *multiplied by* compensatory factors EQUALS the aggregated score

Example	**Ligature point rating**		**Room rating**		**Patient profile rating**		**Compensatory factors**		**Aggregated score**
Bedroom 1	**2**	*Multiplied by*	**1**	*Multiplied by*	**3**	*Multiplied by*	**1**	**EQUALS**	**6**
Bedroom 2	**10**	*Multiplied by*	**3**	*Multiplied by*	**3**	*Multiplied by*	**2**	**EQUALS**	**180**

LIGATURE AUDIT									
Ward Area	Room	Ligature point Identified	Rating				Aggregated score by room	Recommended Action	
			Ligature point	Room	Patient profile	Compensatory factors		Remove / Replace	Protect / Manage Locally