

Management of patients with Acute Severe Behavioural Disturbance in Emergency Departments

1. Purpose

This Guideline provides recommendations regarding best practice to support the management and initial sedation requirements of patients who present to emergency departments (ED) with acute severe behavioural disturbance (ASBD). This guideline applies to children, adolescents (children and adolescents includes those under 16 years) and adults (including patients over 65 years of age and patients who are medically frail regardless of age).

This Guideline has been adapted with permission for Queensland context and is based on the New South Wales Ministry of Health © 2015 Guideline 'Management of patients with Acute Severe Behavioural Disturbance in Emergency Departments'.

2. Scope

This Guideline provides information for all Queensland public health system employees (permanent, temporary and casual) and all organisations and individuals acting as its agents (including Visiting Medical Officers and other partners, contractors, consultants and volunteers).

3. Related documents

Standards, procedures, guidelines

- *Mental Health Act 2016* (Qld)
- *Public Health Act 2005* (Qld)
- *Hospital and Health Boards Act 2011* (Qld)
- *Guardianship and Administration Act 2000* (Qld)
- *Criminal Code Act 1899* (Qld)
- *The Child Protection Act 1999* (Qld)
- *Powers of Attorney Act 1998* (Qld)
- *Disability Services Act 2006* (Qld)
- Safe transport of people with a mental illness: Queensland interagency agreement, Queensland Health (including Queensland Ambulance Service and Queensland Police Service), 2014
- Guide to Informed Decision-making in Healthcare. Queensland Health, 2012

- Physical restraint safety risks, Patient Safety Communiqué, 7 June 2016, Patient Safety and Quality Improvement Service, Department of Health, Queensland Health
- Drug and Alcohol Withdrawal Clinical Practice Guidelines. Queensland Health, 2012
- Protocol for Inter Hospital Transfers (IHT) of the critically ill patients. Queensland Health 2015
- Protocol for Inter Hospital Transfers of the non time critical patient, Queensland Health 2015
- Guideline: acute behavioural disturbance management (including acute sedation) in Queensland Health Authorised Mental Health Services (adults). Queensland Health, in draft
- Guideline: acute behavioural disturbance management (including acute sedation) in Queensland Health Authorised Mental Health Services (children and adolescents). Queensland Health, in draft

4. Guideline for the Management of patient with Acute Severe Behavioural Disturbance in Emergency Departments

This Guideline **does not replace clinical judgement**, the decision to proceed with emergency care as outlined in this document are made on clinical grounds and are authorised by appropriately trained medical and / or nursing staff. Local decision making processes and procedures should be developed in conjunction with this Guideline and local stakeholder groups.

The focus for this Guideline is the safe care of adult and paediatric patients in EDs, who are unable to have a full medical assessment completed due to the ASBD and may require the administration of sedation before initial assessment can occur.

This document is guided by the principles of least restrictive, collaborative, patient centred care and offers guidance on the following aspects of behavioural management and sedation:

- Assessment of the patient with ASBD in a safe environment
- Use of de-escalation techniques that focus on engagement of the person with ASBD to allow for assessment
- Ensuring that legal requirements are adhered to, particularly in relation to the *Mental Health Act 2016*, the *Public Health Act 2005*, the *Guardianship and Administration Act 2000*, *The Child Protection Act 1999*, *Queensland Criminal Code Act 1899* and the clinician's duty of care to the patient
- Sedation of the patient whose behaviour puts them or others at immediate risk of serious harm and which is unable to be contained by other means. There is also reference to physical restraint of the patient if required
- Post-sedation care of the patient including observations and documentation
- Disposition decisions and transport of the patient from the ED to the most appropriate area for continuation of their care; or
- This Guideline is specifically for use in Queensland Emergency Departments and is different to available guidelines or procedures specific to the management of acute behavioural disturbance in Queensland authorised Mental Health Services.

This Guideline describes the ED management of patients with ASBD from any cause. A Psychostimulant Early Intervention Flowchart has also been developed by Queensland Health's Insight Clinical Support Services and is a useful resource when managing complications of known psychostimulant abuse including acute behavioural disturbance: www.insightqld.org/meth-check/

4.1 Assessment of the patient in a safe environment

4.1.1 General principles

The ED evaluation of the patient with ASBD requires an initial brief assessment aimed at determining the most likely cause of agitation and the level of risk of injury / violence. Once the patient is calmed, a more extensive medical and psychiatric assessment should be undertaken. The objective of the initial evaluation is not a definitive diagnosis, but a differential diagnosis that informs immediate management of ASBD, so that more detailed evaluation, management and disposition are possible.

Care of the patient should ensure a coordinated and proactive approach to management. Wherever possible, take into consideration information from family, carers and other service providers directly involved in the presentation; this information can aid in diagnosis, assessment of risk, and influence management and discharge planning. Use of interpreters should be considered at the earliest opportunity for those in need, such as deaf patients and patients from culturally and linguistically diverse backgrounds and their family / carer. For patients from Aboriginal and Torres Strait Islander background, at every opportunity consideration should be given to contacting Aboriginal Liaison Officers and/ or Indigenous mental health workers, where available, for advice and / or assistance.

Specific considerations should be made for patients with a disability such as those with intellectual disability (ID) or autism spectrum disorder (ASD). If possible seek advice from the patient's treating paediatrician / psychiatrist or if transferring to another facility the accepting paediatrician or psychiatrist. Detail should be sought on current medication plans, behaviour support plans, communication plans / aides, and sensory considerations for the patient (particularly for those diagnosed with autism).

Assessment of children and adolescents should be conducted in consultation with specialist paediatric and / or child and adolescent mental health staff wherever possible.

4.1.2 Maintaining safety

Assign the appropriate triage scale as per the Australasian Triage Scale. The Mental Health Triage Tool can be used to assist triage decision making.

The following steps will assist in ensuring that the safety of the patient, staff and others in the ED is ensured as a priority:

- Assess in a space where distractions are minimised and you can give full attention to the patient. This is particularly relevant for patients with ID and ASD
- Remove other patients and bystanders from the immediate vicinity, acknowledging that family and significant others may have an important role in assessment of the patient
- Consider risks in the context of the ED setting (absconding, environmental hazards)
- Ensure staff egress from the assessment area is maintained, for example by only using assessment rooms with at least two doors
- Call security if necessary and ensure they receive adequate information about the patient, the situation and what is being asked of security officers
- The patient with ASBD should not be assessed alone. The primary clinician assessing the patient should have at least one other staff member in attendance
- Do not approach a patient who is holding or has access to a potential weapon. Instead verbally de-escalate from a safe distance with the intention of encouraging the patient to place the weapon on the floor and step away to a safe distance for the team to remove the

weapon

- Approach in a calm, confident manner and avoid sudden or threatening gestures
- Avoid prolonged eye contact, and do not confront, corner or stand over the patient
- Seek help if you feel threatened or at risk
- Be familiar with locality of duress alarms
- If available carry a portable, personal duress alarm on your person at all times
- A search of the patient and their possessions may be allowable under certain legislation or Hospital and Health Service policy if there is a reasonable suspicion that the patient has brought potentially dangerous items or drugs into the facility
- EDs with fewer resources need to have lower thresholds for referral and service escalation and local escalation plans / processes should be in place for all EDs. Do not attempt to manage ASBD without adequate support and resources. Where the patient presents a risk to public safety, or their own safety, which can not be managed within the resources available to the facility, the Police should be called.

4.1.3 Medical evaluation

Behavioural disturbance can have many causes, and may or may not be related to a mental illness. Medical disorders causing an agitated delirium are a common cause of ASBD. Therefore, both medical and psychiatric evaluation is essential.

However, a full medical assessment may need to be interrupted to address treatment of the patient's ASBD.

4.1.4 Major causes of agitation to consider

General medical condition: acute delirium, head trauma, encephalitis, meningitis, or other infection, encephalopathy (particularly from liver or renal failure), metabolic derangement (e.g. hyponatraemia, hypocalcaemia, hypoglycemia), hypoxia, seizure (post-ictal) and behavioural and psychological symptoms of dementia (BPSD).

Intoxication / withdrawal: alcohol, hallucinogens, stimulants (amphetamine type substances and cocaine), cannabis, synthetics, opioids, benzodiazepines or other drug toxicity.

Patients at risk of withdrawal should be managed according to the Drug and Alcohol Withdrawal Clinical Practice Guidelines – Queensland Health. For adult, children and young people with suspected ASBD secondary to substance intoxication or toxicity, contact the Queensland Poisons Information Centre on 13 11 26.

Mental health conditions: Psychotic disorders, mania, agitated depression, anxiety disorders, borderline and anti-social personality disorders.

Others: developmental disorders e.g. ID, ASD, psychosocial adjustment, situational crisis, impulse control disorders and pain.

4.1.5 More detailed medical evaluation

Once the patient is able to be further assessed, aim to identify any potential medical, psychiatric or other causes for the behaviour. Also determine whether or not the patient has a known mental health condition and if the current presentation is consistent with this.

4.2 De-escalation techniques

The initial approach to a person with behavioural disturbance should be focused on attempts to de-escalate the behaviour through the use of specific de-escalation techniques and engagement of the person in conversation. All staff involved in this process should be trained and skilled in de-escalation.

De-escalation frequently takes the form of a verbal loop in which the clinician actively listens to the patient, finds a way to respond that agrees with or validates the patient's position as far as possible, and then explains what the clinician wants the patient to do, e.g. accept medication, sit down with the clinician, etc. The loop repeats, as the clinician listens again to the patient's response, seeking to understand the patient's point of view and to negotiate a resolution.

The following are strategies that can be utilised in de-escalation:

- Approach in a calm, confident and non-threatening manner, with a non-aggressive stance with arms relaxed
- Be empathic, non-judgemental and respectful. Listen to the patient's concerns
- Introduce yourself, your role and the purpose of the discussion, lead the discussion and engage the patient. Whilst other staff should remain in the vicinity to offer support, it is imperative that only one staff member verbally engage the patient
- Emphasise your desire to help. Ask what they want and what they are worried about
- Focus on the here and now, identify what is achievable, rather than declining all requests, small concessions can build trust and rapport
- Try to identify the patient's unmet needs and help them explore their fears
- Use short clear statements which do not include medical jargon. The patient may not have the capacity to process information. For patients with a disability ensure communication aligns with the considerations in the patients' communication plan
- Use a slow, clear and steady voice and don't raise your voice. If the patient raises their voice, pause and wait for an opening and allow the patient to vent some of their frustrations
- Courtesies such as a cup of (lukewarm) tea, sandwiches, access to a telephone (or a staff member making a phone call on their behalf) and attending to physical needs can be very helpful
- Where relevant, the patient should be given the option of taking oral medication (Appendix 2-4) for suggested adult, child and adolescent drug regimes)
- Offer a choice of Nicotine Replacement Therapy (NRT) e.g. gum / lozenges, patches or a nicotine inhaler if the patient requests a cigarette. Avoid entering into discussions about leaving ED to have a cigarette and focus these conversations on keeping the patient within the safety of the ED
- Getting trusted relatives or staff to talk to the patient may help. If the patient persists in directing their anger or suspicion directly at the clinician, it may be appropriate for you to ask another staff member to attempt de-escalation
- Avoid potentially provocative statements such as "calm down" or "if you don't settle downx will happen" "you'd better stop that right now...or else" as this is likely to escalate the patients behaviour in response to the perceived threat.

4.2.1 De-escalation techniques with children and adolescents

- All patients have the right to information in the healthcare setting. For children and young people, this is described in the *Charter of the Rights of Children and Young People in Healthcare Services in Australia*.
- A non-judgemental attitude towards the behaviour of the child or adolescent is critical to

gaining engagement.

- Check with and, where appropriate, involve parents / guardians in utilising calming or de-escalation techniques that they have used.
- Where relevant, the patient should be given the option of taking oral medication. Most children / young people can be supported in agreeing to take this option.
- Reassuring and helping parents / guardians to contain their own anxiety can assist in the management of children and young people. If it is felt that the presence of the parents / guardian / family / friends is increasing the child / adolescent's level of agitation then separating them within the department may be beneficial. Individuals who appear to calm the situation can be asked to stay.

4.3 Legal requirements for urgent treatment of acute severe behavioural disturbance

In the treatment of patients with ASBD, three pieces of legislation are relevant for clinicians in their duty of care to provide urgent treatment without the patient's consent if required for their safety or the safety of others:

1. Chapter five of the, *Guardianship and Administration Act 2000* permits the treatment of a patient 18 years or over without consent where the patient is incapable of giving consent for the treatment and only where the treatment is necessary, as a matter of urgency:
 - to save the patient's life;
 - prevent serious damage to the patient's health; or
 - prevent the patient from suffering or continuing to suffer pain or distress.

The treatment should be the least restrictive option in the circumstances. This decision should be documented in the patient's Health Care Record or electronic medical record. Guidance on determining a patient's capacity to consent to treatment is available in *the Queensland Health Guide to Informed Decision-making in Healthcare*.

2. A patient may be treated for a mental illness involuntarily under the *Mental Health Act 2016* if the criteria within the legislation are met. Involuntary treatment (including medication) may be provided to patients under:
 - an examination authority
 - a recommendation for assessment
 - a treatment authority
 - a Forensic Order
 - a treatment support order; or
 - a person detained in an authorised mental health service or public section health service facility under section 36; or
 - a person from another State detained in an authorised mental health service under section 368(4).

The *Mental Health Act 2016* requires that treatment for a person's mental illness be provided in the least restrictive way. This means that where possible, treatment should be provided with the person's consent (including an advance health directive) or consent of a parent, guardian or substitute decision maker.

Seclusion and mechanical restraint may only be applied under the *Mental Health Act 2016* to relevant patients. Seclusion must be authorised by an authorised doctor; however in emergency circumstances, a health practitioner in charge of a unit, including an emergency department, may authorise seclusion. Mechanical restraint may only be authorised with the approval of the Chief Psychiatrist.

A relevant patient means a patient subject to:

- a treatment authority
- a Forensic Order
- a treatment support order; or
- a person from another State detained in an authorised mental health service under section 368(4).

Physical restraint and medication use are also regulated under the *Mental Health Act 2016*. An offence provision applies where physical restraint is used in an authorised mental health service other than in accordance with the Act; however this provision does not apply in urgent circumstances or if the restraint is authorised under another law. Medication must only be used where clinically necessary for the patient's treatment and care for a medical condition. This includes the provision of treatment and care preventing imminent serious harm to the patient or others.

3. If a child or young adult is unable to consent and there is no one else available with authority to consent on their behalf, the *Criminal Code Act 1899* removes criminal liability for a surgical operation or medical treatment performed or provided in good faith, with reasonable care, and for the child's benefit.
 1. A person is not criminally responsible for performing or providing, in good faith and with reasonable care and skill, a surgical operation on or medical treatment of:
 - a person or an unborn child for the patient's benefit; or
 - a person or an unborn child to preserve the mother's life; if performing the operation or providing the medical treatment is reasonable, having regard to the patient's state at the time and to all the circumstances of the case.
 2. If the administration by a health professional of a substance to a patient would be lawful under this section, the health professional may lawfully direct or advise another person, whether the patient or another person, to administer the substance to the patient or procure or supply the substance for that purpose.
 3. It is lawful for a person acting under the lawful direction or advice, or in the reasonable belief that the advice or direction was lawful, to administer the substance, or supply or procure the substance, in accordance with the direction or advice. (Surgical operations and medical treatment, Section 282, Criminal Code Act 1899).

4.4 Consent

Patient consent, or the consent of a parent or guardian, should be sought prior to the administration of any treatment.

In Queensland all persons aged 18 years and over (adults) are presumed to have capacity to make decisions about their own healthcare, except when it can be shown – following an appropriate clinical assessment – that they do not have the capacity to make such decisions.

For persons aged under 18 years there is no fixed lower limit which children and young persons are deemed to be able to consent to healthcare. Generally a child's capacity to consent to treatment increases as they mature. It should be noted the authority of parents and guardians to consent on behalf of a child or young person is not absolute. Parental responsibility decreases as the young person matures, until the child reaches 18 years of age. As a result of this there may be times when the parent or guardian and the child or young people simultaneously have the ability to provide consent to healthcare.

However there are, at times when patients under the age of 18 are able to consent to healthcare where they have demonstrated sufficient evidence that they have decision making capacity. This is referred to as "Gillick competence". If however a child or adolescent does not have capacity to consent, consent is obtained from a parent or other person with parental responsibility.

Consent for emergency sedation should therefore be sought from the child and their parent or guardian wherever possible. However as with adults, treatment can be administered to children without consent in an emergency situation or to treat a child at risk.

The *Queensland Health Guide to Informed Consent* outlines that in case of urgent and life-saving situations:

In urgent and life-saving situations, health practitioners are expected to make reasonable attempts (considering the circumstances and time permitting) to obtain consent from the child or young person (if they have capacity to do so) and/or from someone with parental decision-making responsibility. However, if this is not possible, healthcare is provided without unreasonable delay if the health practitioner believes on reasonable grounds it is immediately necessary to save a child or young person's life or to prevent serious injury to their health.

In such cases the healthcare is:

- *in the best interests of the child or young person*
- *the minimum necessary for the purpose of saving the child or young person's life or to prevent serious injury to their health*
- *where there is more than one option, the one that is consistent with good medical practice and leaves most future choice open to the child or young person.*

The health practitioner making the decision to provide healthcare in the absence of consent is responsible for documenting clearly in the patient's clinical records:

- *that consent was not obtained*
- *the reasons for providing healthcare without consent including:*
 - *the assessment of the child or young person's capacity to consent*
 - *any steps taken to contact someone with the authority to consent for the child or young person and any resulting discussions*
 - *the healthcare is immediately necessary to save a child or young person's life or to prevent serious injury to their health.*

Other legislation for adults, children and adolescents which requires consideration includes:

- *Public Health Act 2005 (Qld)*
- *Powers of Attorney Act 1998 (Qld)*
- *Guardianship and Administration Act 2000 (Qld)*
- *Disability Services Act 2006*
- *Criminal Code Act 1899 (Qld)*
- any other relevant law.

4.5 Sedation

4.5.1 Indications for sedation and preparation for sedation

This Guideline aims to provide assistance to ED staff in choosing the appropriate sedative agent and route of administration – local practice, familiarity and availability of agents will also guide choice of drug and route in each case.

The use of sedation should only be considered after all de-escalation techniques have been attempted.

Patients should be offered oral medication in the first instance. Where a patient refuses oral sedation and exhibits dangerous, violent or unpredictable behaviour that poses a safety risk to the patient or staff or other patients and visitors parenteral sedation should be considered if the patient's condition requires that they remain in ED for further assessment and / or treatment. This group of patients will score +2 or +3 using the 'Sedation Assessment Tool' (Appendix 1).

The aim is to achieve an appropriate and safe level of sedation quickly with sufficient medication to manage ASBD and to facilitate an accurate assessment and appropriate management of the patient's underlying condition. **The level of sedation should ensure that the patient is drowsy but rousable. The procedure is not intended to render the patient unconscious.**

- Intramuscular (IM) administration of sedative agents in highly agitated patients is preferable as the first line of parenteral sedation. IM injection is typically able to be administered more rapidly and carry less risk when compared with attempting intravenous (IV) cannulation in an aggressive patient.
- In situations when the patient already has IV access insitu, it may be quicker and safer to administer medication via the IV rather than IM.
- Please note Appendices 2, 3 and 4 for the recommended algorithms of this Guideline. Algorithms are detailed separately for adults and paediatrics.
- Sedative neuroleptic drugs, such as droperidol, have been shown to provide effective sedation for patients with ASBD with time to sedation similar to benzodiazepines.
- Sedation with droperidol is associated with fewer adverse events and less need for repeat sedation than midazolam (Calver et al. 2010).
- Droperidol is equally effective via both the IM and IV routes, with the median time to effective sedation reported as 20 minutes following 10 mg IM droperidol and 10 minutes following 10 mg IV droperidol administration. However the overall "time to effective sedation" using the IV route may be slower as the time and resources required for the insertion of the IV cannula should be factored in.
- An initial dose of 10 mg IM droperidol provided effective sedation in 69% of patients in an Australian study conducted in 2015 with the remainder requiring additional dose (or doses) of sedative drugs. A second dose of 10 mg droperidol 15 minutes after the first dose was shown to be safe and effective with almost all patients being effectively sedated within 120 minutes. Droperidol in these doses was demonstrated to be safe and effective in the management of ASBD (Calver 2015).
- In a 2006 randomised controlled clinical trial comparing IV midazolam versus IV droperidol for the sedation of acutely agitated patients in an Australian ED there was no significant difference in onset of adequate sedation between the two agents but a reported increased requirement for active airway management in the midazolam group coupled with an increased requirement for further sedation within 60 minutes in the midazolam group (Knott 2006).
- The 2010 Australian ED DORM study found that 10mg IM droperidol alone and IM midazolam alone were equally effective in controlling violent and acute behavioural disturbance but 10mg IM midazolam was associated with a greater number of adverse effects including unpredicted oversedation, oxygen desaturation, airway obstruction requiring intervention and a greater need for additional sedation. This study also reported that a combination of 5mg IM midazolam and 5mg IM droperidol was not superior to droperidol alone (Isbister 2010).

The parenteral sedation recommendations in this guideline have been derived from these studies and recommend the use of 10mg IM or IV (if already inserted prior to the ASBD) droperidol in repeated doses 15 minutes apart up to 30 mg in a 24 hour period with close observation and vital sign monitoring being provided in a clinical area with equipment and personnel present and capable of providing immediate advanced airway and circulatory management if necessary.

The use of parenteral benzodiazepines either alone or in combination with droperidol may be associated with increased adverse events and the need for additional sedation and is not recommended.

A small number of patients remain acutely disturbed and difficult to manage despite repeated doses of droperidol. In the study by Calver et al in 2015 which reported on the safety and effectiveness of droperidol sedation for ED patients with acute behavioural disturbance only 8% of patients were not sedated with 1 or 2 doses of droperidol and only 3% after 3 doses.

Whilst only a small group, these patients pose a significant challenge as a consequence of their ongoing risk of harm to themselves, other patients and staff.

Ketamine has been successfully used as second line agent in these 'difficult to sedate' patients and was recently reported as safe and effective in 49 patients whom had already received varying doses of droperidol (10-30 mg) or combinations of droperidol and benzodiazepines. In this group of patients a median dose of 300 mg IM ketamine (range 50-500mg) resulted in effective sedation in 44 patients within 120 mins with a median time to sedation post ketamine dose of 20 minutes. Three patients (6%) had adverse effects (vomiting in two patients and transient oxygen desaturation responding to oxygen in 1 patient). Four of the five failures were with doses of 200mg ketamine or less. The authors recommended a dose of 4-6 mg/kg IM ketamine be considered in patients who have failed previous attempts at sedation. In this small sample doses of less than 200 mg were associated with treatment failure (Isbister 2016).

Safe administration of sedation of a patient with ASBD requires a coordinated team, good timing and practice.

- Once the team is assembled, roles and responsibilities should include a team leader, medical and nursing staff to administer medications, clinicians and security staff who have undergone the necessary training to physically restrain a patient (also see section 3.6 physical restraint).
- Sedation of the patient should occur in an area where resuscitation equipment and appropriate monitoring is immediately available and wherever possible should be undertaken in a resuscitation room.
- One member of clinical staff should be assigned as the person to communicate with the patient. This should be delegated to a clinician who has a good rapport with the patient where possible. It is the role of this clinician to communicate clearly with the patient throughout the sedation process, explaining what is happening and offering reassurance to the patient.
- A dedicated team member should be near the head of the patient to monitor the patient's airway and physical condition. Where possible with the use of physical restraint, it is recommended that a "hands off" team leader is utilised to oversee the restraining and identify complications.
- It should be recognised that many patients with ASBD have experienced significant trauma and abuse during their lives which may increase the distress experienced during physical restraint and / or sedation. Efforts should be made to minimise this distress through clear communication and sensitivity to issues of gender and culture.
- Efforts should be made to shield the patient from public view and to maintain their dignity throughout the procedure.

4.5.2 Potential complications of sedation

Practitioners who administer sedation must be able to manage complications if they arise, including having the appropriate resuscitation equipment and skills. There is a wide variability in response to these agents and thus the safety margin also varies between patients. It must be remembered that if

more than one agent is used, the effect is additive (both in terms of being therapeutically beneficial and side effect risk).

This risk is further compounded by the fact that many patients with ASBD have taken a number of unknown drugs and/or an unknown quantity of alcohol which may potentiate the sedative effects of the agents used.

The practitioner must be prepared to, and able to, manage the following (for both adults and paediatrics):

- Airway obstruction and a depression of protective airway reflexes. The risk of vomiting and potential aspiration must be anticipated
- Depression of ventilation
- Hypotension
- Cardiac arrhythmias.

Although a thorough history and examination may not be possible, certain patients may be at higher risk of complications than others, for example, those with chronic respiratory diseases (including chronic obstructive pulmonary disease) and patients with general ill health, patients with morbid obesity and pregnant women. Children and young adults may be more prone to the extrapyramidal side effects of antipsychotic agents (reference AMH Children's Companion).

Complications associated with the specific parenteral agents used in this Guideline include:

Droperidol: adverse effects include hypotension, respiratory depression (especially if administered with benzodiazepines), extrapyramidal side effects (although quite rare may require benztropine 1-2 mg IV) and QT prolongation (rarely clinically significant at doses commonly used for ASBD).

Benzodiazepines: respiratory depression may occur and airway and ventilatory support may be required; hypotension. Intoxicated patients (particularly with alcohol and opiate intoxication) are at higher risk of complications and respiratory depression when using benzodiazepines. On occasion, paradoxical excitation may occur, with agents like midazolam (reference AMH).

Ketamine: increased secretions; tachycardia; hypertension, emergence hallucinations.

4.5.3 Post sedation care of the patient including observations and documentation

Following parenteral sedation of any acutely behaviourally disturbed patient, monitoring of vital signs and level of sedation (e.g. using a 'Sedation Assessment Tool', see Appendix 1) is required.

Continuous pulse oximetry and close observation is recommended in all patients until they are able to respond to verbal stimuli.

All clinical staff should be empowered to escalate any concerns regarding the patient (eg. abnormal vital signs, evidence of airway obstruction or respiratory depression) to the relevant medical staff at any time.

It is acknowledged that it may not be possible to continuously monitor all of the vital signs if, by doing so, safety of the staff or patient is compromised. However, in those circumstances, continuous visual observation is required to ensure patient safety.

For paediatric patients, medical officers must be notified if the patient triggers a Children's Early Warning Tool (CEWT) score greater than or equal to 2 for any of the domains.

4.5.4 Sedation scale and use of a 'Sedation Assessment Tool'

The level of sedation of the patient should be monitored. The 'Sedation Assessment Tool' (Appendix 1) is a simplified version of the altered mental status score (AMSS) and is a 7-point scale assessing levels of agitation and sedation using only two descriptors.

Use of the 'Sedation Assessment Tool' is recommended to assist in determining the need for sedation and assessing the effectiveness of sedation. Effective sedation can be defined as a reduction of 2 levels in the SAT score or a return to a score of zero.

4.6 Physical restraint

Physical restraint should only be used in extreme circumstances, should not be used if there is a less invasive method of treatment and should only be considered after all de-escalation techniques and other less invasive methods of treatment have been attempted.

Physical restraint is the intentional restriction of a person's voluntary movement by the use of any manual, physical or mechanical means, which cannot be easily removed and involuntarily restricts the freedom of movement or normal access to one's body, material or equipment.

Brief 'hands-on' physical restraint is utilised as part of most episodes of parenteral sedation of patients with ASBD. Immobilisation of the patient through control of the limbs and head is the safest mechanism for restricting movement while medication is administered and until calming of the patient is achieved.

This is generally achieved through the use of hands-on physical restraint.

Rarely the use of a mechanical restraint device (MRD) is required. MRD is the application of a mechanical device for the purpose of providing physical restraint.

If utilisation of physical restraint is deemed the most appropriate course of treatment consideration must be given to the following:

- For patients of an authorised mental health service (including an ED within a gazetted service) or involuntary patients under the *Mental Health Act 2016*, use of physical restraint must adhere to the provisions of that Act (Chapter 8 Use of mechanical restraint, seclusion, physical restraint and other practices).
- For patients aged 18 years and over who do not have capacity to consent or decline consent, the use of restraint (including physical restraint and sedation) may be authorised under the *Guardianship and Administration Act 2000 (Qld)* sections 63 and 75 where:
 - The restraint constitutes 'healthcare', that is, where the practise, as a treatment, has a therapeutic effect upon a patient's physical or mental condition; and should be carried urgently to:
 - meet imminent risk to the adult's life or health; or
 - should be carried out urgently to prevent significant pain or distress to the adult and it is not reasonably practical to get consent from a person who may give it under the *Guardianship and Administration Act 200 (Qld)* or the *Powers of Attorney Act 1998 (Qld)*.
 - The *Guardianship and Administration Act* provides in section 75, "a health provider and a person acting under the health provider's direction or supervision may use the minimum force necessary and reasonable to carry out health care authorised under this Act".
- Where the child or young person is unable to consent and there is no one else available with authority to consent on their behalf, the *Criminal Code Act 1899* removes criminal liability for a surgical operation or medical treatment performed or provided in good faith, with reasonable care, and for the child's benefit.

Important Notes

- Ensure appropriate executive oversight of physical restraint practice.
- Ensure physical restraint is a coordinated team effort with a suitably qualified and experienced health professional leading.
 - *Wherever possible a medical practitioner or registered nurse should be placed at the patients head to protect the airway, monitor vital signs and ensure the chest are is not compressed during restraint. (Patient Safety Communique, Physical restraint safety risks, Queensland Health, Patient Safety and Quality Improvement Service)*
- Do not maintain physical restraint any longer than is required for sedation or de-escalation techniques to take effect
 - *Physical restraint of any type should be for the shortest possible time (Patient Safety Communique, Physical restraint safety risks, Queensland Health, Patient Safety and Quality Improvement Service)*
- Avoid (if possible) taking patients to the floor during physical restraint.
 - *If restraint on the floor is necessary, the supine position should be used and not the prone position which increases the possibility of potential asphyxia.*
 - *If in the course of a physical restraint a person is placed in the prone position, this must cease immediately or as soon as practicable and should not exceed 2 minutes (Patient Safety Communique, Physical restraint safety risks, Queensland Health, Patient Safety and Quality Improvement Service)*
- Each occasion of any physical restraint to a patient must be recorded in the patient medical record or electronic medical record including start and end times.
- Measures must be taken to ensure the health, safety, comfort and dignity of the patient is maintained at all times.

Restraint should be removed once adequate sedation or control is achieved.

Further information in relation to is available in the *Guide to Informed Decision – Making in Healthcare 2012* which has been developed as a reference tool to support practitioners in understanding the complex ethical and legal requirements surrounding informed decision-making about healthcare and in implementing the *Queensland Health Informed Decision-making in Healthcare Policy (2011)*.

4.7 Documentation and reporting

Accurate and timely recording of information related to sedation of the behaviourally disturbed patient is essential and should include:

- Consent
 - Document patient competency for decision making (i.e. delirium, drug or alcohol intoxication, child, no insight of risk to themselves, staff or others).
 - Document which legislation has been enacted (i.e. Mental Health Act, Guardianship, Criminal code).
- Indication for sedation
 - Record what de-escalation techniques were undertaken prior to sedation (i.e. verbal and nonverbal techniques) and if there were no attempts made to de-escalate, then the reasons for that (recognising that this may occur on occasion).
- Medications administered

- Rationale for any medications administered and details.
- Observations undertaken
 - Include patient positioning during and after sedation (i.e. supine, prone, recovery position).
 - Frequency of observations pre and post sedation (visual and physical).
- Physical restraint
 - Why utilisation of restraint (i.e. risk of absconding, patient risk to self, staff or others).
 - Form of restraint (i.e. handcuffs, staff restraint).
 - Risk of using restraints (i.e. restricted breathing, metabolic disturbance, risk to self, staff or others).
- Adverse events
 - Include examples such as harm to self, staff or others, physical damage to environment.

When caring for children and adolescents, the involvement of parents / guardian should be included in the documentation. The person responsible for the child / adolescent following discharge and for follow up care should also be documented.

4.8 Patient and staff debriefing following sedation

The experience of sedation and / or restraint can be a distressing experience for the patient. At a time when the patient is calmer and able to engage with staff they should be offered the opportunity to discuss the incident with a skilled staff member who is able to listen to the patient's experience as well as providing feedback and rationale for the intervention. Consideration should also be given to the emotional wellbeing of other patients and/or visitors who witness such events.

Following a further evaluation and risk assessment for safe discharge, if a patient is to be discharged from ED following an episode of sedation, they (and carer(s)) should be offered written and verbal advice on post sedation care including the need to avoid driving and operating machinery. A patient should also be offered support numbers for, or formally referred to, Mental Health and Drug and Alcohol services where indicated.

Facilitated staff debriefs following an incident of sedation and / or restraint offers a valuable opportunity for staff to express their feelings about the event as well as the opportunity to reflect on and learn from incidents to improve practice and processes. Staff debriefs should include all staff involved in these episodes including security personnel and orderlies.

4.9 Disposition decision and transport

4.9.1 Patient disposition

It is recognised that the ED may not be the appropriate place for prolonged ongoing monitoring and definitive clinical management of sedated patients with ASBD. These patients often require extended periods of care for definitive treatment, or before eventual safe discharge, and this ongoing care may need to be provided in an Intensive Care or High Dependency Unit or within an appropriate inpatient unit setting which has access to vital signs monitoring and resuscitation equipment along with staff whom possess the skills to identify and manage complications of sedation. Appropriate disposition of the post-sedation adult or paediatric patient is determined after consideration of the following factors:

- The likely underlying predominant aetiology of the behavioural disturbance (drug intoxication or

withdrawal, other medical condition requiring acute management, or mental health condition) which will guide the choice of admitting specialty.

- The patient's current physical status as evident by their medical condition, post-sedation monitoring of vital signs and level of sedation, which will indicate any requirement for higher level care such as HDU or ICU.
- The site clinical facilities, including presence of an HDU, mental health unit, drug and alcohol service, toxicology service or inpatient specialist medical or other specialised units, which will determine the need for transfer to another site for further care.

The disposition decision must be made in conjunction with the responsible senior medical practitioner, and enacted in accordance with applicable Access Targets with priority being given to the safe management of a sedated patient. Local collaboration between community services, EDs, inpatient units, police and the ambulance service will enhance the smooth transition of care between services and provide better integration of care for patients.

4.9.2 Transport considerations

The transfer / transport of the patient who has been sedated increases risks to the patient and potential risk to attending staff. Vigilance is required to maintain patient safety and protect attending staff. This includes the patient being transferred between departments e.g. for imaging or between facilities.

The following principles of safe transfer / transport of the sedated patient must be adhered to:

- Ensuring the safety of patients, significant others, service providers and the public is of paramount importance.
- Reassessment of any ongoing need for restraint (sedation or physical) is required prior to transport.
- Individuals should have access to timely and effective healthcare, including specialist mental health assessment and treatment/care, and safe transport to an appropriate health facility when needed, based on the individual's clinical needs.
- Wherever possible, an individual should be treated in their own community.
- Transport and care should be provided in the context of cooperative and coordinated action between agencies, with the development of mechanisms to ensure clear role expectations, communication and appropriate sharing of information.
- Early advice from Retrieval Services Queensland (phone 1300 799127) should be sought if an aeromedical means of transfer may be required.

Refer to the following Protocols and Agreements.

- Safe transport of people with a mental illness: Queensland interagency agreement, Queensland Health (including Queensland Ambulance Service and Queensland Police Service), 2014
- Protocol for Inter Hospital Transfers (IHT) of the critically ill patients. Queensland Health 2015
- Protocol for Inter Hospital Transfers of the non time critical patient, Queensland Health 2015

4.10 Ensuring best practice use of this guideline

Hospitals using this Guideline are encouraged to proactively audit patient cases to ensure best practice use of the Guideline and to ensure there are mechanisms in place for resolution of critical incidents. These mechanisms should be in line with the requirements of the *Health Service Directive Patient Safety, Guideline for Clinical Incident Management*.

A proactive audit process aimed at review of the implementation of this Guideline will assist in supporting quality assurance for patients, education of staff involved in the management of patients with ASBD in EDs, improvement of the process of management of patients presenting to EDs with ASBD and encourage collaboration between the multiple services involved in the care of these patients.

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5. Definitions of terms used in the guideline

Term	Definition / Explanation / Details	Source
Acute Severe Behavioural Disturbance	Behaviour that puts the patient or others at immediate risk of serious harm and may include threatening or aggressive behaviour, extreme distress, and serious self-harm which could cause major injury or death.	NSW ASBD Guideline
De-escalation	The process of engaging the patient as an active partner in the process of assessment, treatment and recovery with the express purpose of alleviating their current distress and de-escalating their level of ASBD in order to reduce risk.	
Sedation	The process of reducing agitation, irritability and ASBD through administration of sedative medications for the purpose of assessment, treatment and restoring therapeutic alliance.	
Mental Health Act 2016	A Queensland legislative act to provide treatment and care for people who have mental illness	Mental Health Act 2016 (Qld)
Guardianship Act 2000	A Queensland legislative act relating to the appointment of guardians and administrators to manage the personal and financial affairs of adults with impaired capacity.	Guardianship Act 2000 (Qld)
Child Protection Act 1999	A Queensland legislative Act to provide for the safety, wellbeing and protection of children.	Child Protection Act 1999 (Qld)
Healthcare	The Guardianship and Administration Act 2000 (Qld) definition of healthcare which is care or treatment of the adult (with impaired capacity) (a) to diagnose, maintain or treat the adult's physical or mental condition and (b) carried out by, or under the direction or supervision of a health provider	Queensland Health Guide to Informed Decision-making in Healthcare

6. References

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7. Document approval details

Document custodian

Chair of Queensland Emergency Department Strategic Advisory Panel (QEDSAP)

Approval officer

Deputy Director General, Clinical Excellence Division, Department of Health

Approval date: 23 May 2017

8. Version control

Note: A version control table is useful to keep track of changes that have been made to the document.

Version	Date	Prepared by	Comments / reason for update
V1	1/03/2016	Brent McMillin	Initial version
V2	5/08/2016	Brent McMillin	Draft for review by QEDSAP
V3	20/03/2017	Julie-Anne Jaques	Updated Mental Health Act 2016

9. Appendix 1 – Sedation Assessment Tool

Step one

Perform an objective sedation assessment using the 'Sedation Assessment Tool'

Sedation Assessment Tool (SAT)

Responsiveness	Speech	Score
Combative, violent, out of control	Continual loud outburst	+3
Very anxious and agitated	Loud outburst	+2
Anxious/restless	Normal/talkative	+1
Awake and calm/cooperative	Speaks normally	0
Asleep but rouses if name is called	Slurring or prominent slowing	-1
Responds to physical stimulation	Few recognisable words	-2
No response to stimulation	None	-3

Step two

- Follow the algorithm based on Sedation Assessment Tool score and **assessment of frailty** based on age and co-morbidities **as assessed by a senior ED staff specialist**.
- Go to Appendix **2** for management of **adults** (regardless of patient age) with acute behavioural disturbance
- Go to Appendix **3** for management of **medically frail adults** (regardless of patient age) with acute behavioural disturbance
- Go to Appendix **4** for management of child/adolescent with acute behavioural disturbance

Appendix two: Sedation for acute behavioural disturbance in ED

Reproduced with kind permission, Princess Alexandra Hospital, Metro South, Hospital and Health Service.

Have all de-escalation techniques been attempted prior to sedation?

Yes, notify the most senior ED doctor (eg SMO or Registrar) you are proceeding to sedation

Consider Retrieval Services Queensland phone 1300 799 127 or local regional referral centre for advice and/ or transport options

NO, if safe for patient, staff and others continue to use de-escalation techniques

Contraindications to droperidol

Known hypersensitivity or previous dystonic reaction to droperidol or Parkinson disease.

If Droperidol is contraindicated Contact most senior ED doctor (eg SMO or Registrar)



Sedation Assessment Tool +2 or +3

Droperidol 10mg IM
Dose may be repeated after 15 mins.
Maximum dose 30mg in 24 hours

If further sedation is required after the second dose, notify the most senior ED doctor (eg SMO or Registrar)

Failed sedation with Droperidol consider use of **Ketamine 4-6mg/kg IM**

Repeat SAT score in 15 minutes and follow algorithm aiming for a score of 0

Sedation Assessment Tool +1

Diazepam 10-20mg PO Stat
(up to a maximum of 60mg orally in 24 hours)
OR
Olanzapine 10mg PO Stat
(up to a maximum of 30mg by any route in 24 hours)
OR
Diazepam 10mg PLUS Olanzapine 10mg

Repeat SAT score in 30 minutes and follow algorithm aiming for a score of 0

Sedation Assessment Tool 0

No action required

Monitoring a parenterally sedated patient

All patients receiving sedation must have:
Continuous pulse oximetry
vital signs
Sedation Assessment Tool (SAT) score monitored every 15 minutes for 60 minutes

Resuscitation equipment must be present at the bedside

- Notify doctor if:**
- Oxygen stats <94%
 - RR <10
 - PR <50
 - BP <90/50
 - GCS Motor score of <5

Appendix three: Sedation for acute behavioural disturbance in medically frail patients in ED

Reproduced with kind permission, Princess Alexandra Hospital, Metro South Hospital and Health Service.

Have all de-escalation techniques been attempted prior to sedation?

Yes, notify the most senior ED doctor (eg SMO or Registrar) you are proceeding to sedation

Consider Retrieval Services Queensland phone 1300 799 127 or local regional referral centre for advice and/ or transport options

NO, if safe for patient, staff and others continue to use de-escalation techniques



Sedation Assessment Tool +2 or +3

Droperidol 5mg IM
Dose may be repeated after 15 mins.
Maximum dose 15mg in 24 hours
Repeat SAT score in 15 Minutes aiming for reduction of 2 SAT levels.

If further sedation is required after the second dose, notify the most senior ED doctor (eg SMO or Registrar)

Failed sedation with Droperidol consider use of **Ketamine 4-6 mg/kg IM**

Sedation Assessment Tool +1

Diazepam 5-10 mg PO Stat
(up to a maximum of 60mg orally in 24 hours)
OR
In those with Hx Parkinson's or dementia
Diazepam (as above)
OR
Olanzapine 5mg PO Stat
(up to a maximum of 15mg by any route in 24 hours)

Repeat SAT score in 30 minutes and follow algorithm aiming for a score of 0

Sedation Assessment Tool 0

No action required

Monitoring a parenterally sedated patient

All patients receiving sedation must have:
Continuous pulse oximetry vital signs
Sedation Assessment Tool (SAT) score monitored every 15 minutes for 60 minutes

Resuscitation equipment must be present at the bedside

Contraindications to droperidol

Known hypersensitivity or previous dystonic reaction to droperidol or Parkinson disease.

If Droperidol is contraindicated Contact most senior ED doctor (eg SMO or Registrar)

Notify doctor if:

- Oxygen stats <94%
 - RR <10
 - PR <50
 - BP <90/50
- GCS Motor score of <5

Appendix 4 : Sedation for acute behavioural disturbance in child/ adolescent in ED

