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HPFT Policy

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| Lead Author | Consultant (PICU) & Principal Clinical Pharmacist  Lead author, appendix 8 – Darshni Haria |
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| Target Audience | All healthcare professionals involved in the management of acute behavioural disturbance including rapid tranquillisation (RT) |

**Rapid Tranquillisation**

**(RT) Policy**

Guidance for the management of acute behavioural disturbance including rapid tranquillisation.

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| **Document on a Page** |

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| **Title of document** | Rapid Tranquillisation (RT) Policy | | |
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| 7.1 | 21/07/2021 | 06/10/2023 | Consultant (PICU) &  Principal Clinical Pharmacist |
| **Staff need to know about this policy because**  **(complete in 50 words)** | To enable staff to observe relevant legislation when considering management of acute behavioural disturbance, including Rapid Tranquillisation (RT) that is the administering of IM psychotropic medication for both informal service users and those detained under the Mental Health act (MHA) 1983 as amended 2007. This policy details the process to be followed within HPFT. | | |
| **Staff are encouraged to read the whole policy but we (the Authors) have chosen three key messages from the document to share:** | 1. The clinical practice of rapid tranquillisation (RT) is used when appropriate psychological and behavioural approaches have failed to de-escalate acutely disturbed behaviour. The de-escalation process of administering medications by oral route is not classed as Rapid Tranquillisation. 2. When it is deemed necessary to consider use of Rapid Tranquillisation, the decision must be documented and reviewed regularly followed by staff de-briefing, monitoring (using NEWS2 and SOFT Measures charts) and training. 3. This Policy includes Algorithms for RT in adults (18-65 years), older adults (65years+) and Children and Adolescents (12-18 years) | | |
| **Summary of significant changes from previous version are:** | The full policy has been reviewed and changes include:   1. Format change in line with current HPFT Policy template 2. Update of relevant resources (BAP-NAPICU guidelines 2018, BAP consensus guidance on the use of psychotropic medication preconception, in pregnancy and postpartum 2017, NICE Clinical Guideline 97. Dementia. A NICE–SCIE Guideline on supporting people with dementia and their carers in health and social care. 2018) 3. Inclusion of NEWS2 chart and SOFT measure chart 4. Inclusion of Rapid Tranquillisation in Children and Adolescent In-patients (≥12 to ≤18 years) 5. Inclusionfrom CPAC Recorded Guidelines when Cohorting Service Users on Inpatient Wards for Prevention and Management of Acute Disturbance in the context of COVID-19 [(Please click here to link to original document)](https://hertfordshirenhs.interactgo.com/Interact/Pages/Content/Document.aspx?id=6304) 6. Updated based on HPFT IM Clozapine guidelines, 2019 7. Updated in conjunction with HPFT Learning and Development Training. 8. V7.1 – inclusion of quick reference guide to flumazenil as an appendix to mirror document in pharmacy information folders on wards | | |

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| **PART 1 – Preliminary Issues:** |

1. **Introduction**

This document provides guidance for the management of acute behavioural disturbance, including rapid tranquillisation (RT) when it is related to mental illness i.e. the use of IM psychotropic medication for both informal service users and those detained under the Mental Health Act (MHA) 1983 as amended 2007, regardless of their setting.

This guidance has been written in light of the following national guidance:

* NICE Guideline NG 10. Violence and aggression: short-term management mental
* health, health and community settings. 20151
* NICE Clinical Guideline 178. Psychosis and schizophrenia in adults: treatment and
* management. 20142
* NICE Clinical Guideline 97. Dementia. A NICE–SCIE Guideline on supporting people
* with dementia and their carers in health and social care. 20183
* NICE Clinical Guideline 192. Antenatal and Postnatal Mental Health: Clinical Management and Service Guidance. 20147
* NICE Clinical Guideline 185. Bipolar disorder: the assessment and management of bipolar disorder in adults, children and young people in primary and secondary care. 2014.15
* NICE Guideline NG 11. Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges. 20158
* Royal College of Psychiatrists 2014. College Report CR 190. Consensus statement on
* high-dose antipsychotic medication4
* Joint BAP NAPICU evidence-based consensus guidelines for the clinical management
* of acute disturbance: De-escalation and rapid tranquillisation5
* BAP consensus guidance on the use of psychotropic medication preconception, in pregnancy and postpartum 201714

1. **Objectives**

This policy defines:

* The instances when Rapid Tranquillisation should be used
* Who is authorised to use it
* Arrangements the Trust has in place to ensure that the necessary training is available for staff to undertake and the frequency to ensure its appropriate use
* The medicines that should usually be prescribed for rapid tranquillisation
* The monitoring and follow up that have to be undertaken before, during and after rapid tranquillisation

Each decision must be tailored for the individual service user and situation.

1. **Scope**

This document sets out the practice criteria to be followed by all qualified medical and nursing staff (and non-medical prescribers) involved in the prescribing and /or administration of medication for RT. This includes staff employed by the Trust and also those healthcare staff who are either seconded or contracted to the Trust. The document covers the treatment of inpatients in working age adult services, secure and forensic services, specialist women’s services and older people’s services.

Currently this policy does not cover:

* service users with primary diagnosis of substance misuse, behaviour difficulties in Alzheimer’s disease or delirium and

1. **Definitions**

* **Advance decision** - A written statement made by a person aged 18 or over that is legally binding and conveys a person's decision to refuse specific treatments and interventions in the future.
* **Advance statement** - A written statement that is not legally binding and conveys a person's preferences, wishes, beliefs and values about their future treatment and care.
* **Breakaway techniques** - A set of physical skills to help separate or break away from an aggressor in a safe manner; they do not involve the use of restraint.
* **De-escalation** - The use of techniques (including verbal and non-verbal communication skills) aimed at defusing anger and averting aggression. Prn (pro re nata) oral medication can be used as part of a de-escalation strategy; PRN oral used alone is not de-escalation.
* **Gillick competence**: A term used in medical law to decide whether a child (16 years or younger) is able to consent to his or her own medical treatment, without the need for parental permission or knowledge.
* **Incident** - Any event that involves the use of a restrictive intervention – restraint, RT or seclusion (but not observation) – to manage violence or aggression.
* **Medicines Healthcare Products Regulatory Agency (MHRA)** - A government agency responsible for ensuring that medicinesand medical devices work and are acceptably safe.
* **PRN, prn** - *pro re nata* = when required. It must be explained by further information, e.g. route of administration, frequency, minimum dosage interval, maximum daily dose, reason for use and appropriate monitoring
* **Psychiatric emergency** - The service user’s condition is such that it presents a severe risk to themselves or others, e.g. suicidal or violent plans/actions, and requires immediate intervention to lessen that risk.
* **QT** - Refers to the measure of the time between the start of the Q wave and the end of the T wave in the heart's [electrical cycle](http://en.wikipedia.org/wiki/Electrical_conduction_system_of_the_heart).
* **Rapid tranquillisation (RT)** – represents the use of medication by the parenteral route (usually intramuscular or, exceptionally, intravenous) if oral medication is not possible or appropriate and urgent sedation with medication is needed.
* **Summary of Product Characteristics (SPC)** - the SPC is the basis of information for healthcare professionals on how to use the medicinal product safely and effectively. The SPC forms an intrinsic and integral part of the marketing authorisation.
* **Violence and aggression** - A range of behaviours or actions that can result in harm, hurt or injury to another person, regardless of whether the violence or aggression is physically or verbally expressed, physical harm is sustained, or the intention is clear.

1. **Duties and Responsibilities**

* As a Foundation Trust currently operating within a structure of Information Governance, the Board and Chief Executive have the responsibility to ensure effective risk management of service users, provide appropriate training to their staff and provide a suitable infrastructure to establish and continue support for these activities, including recording and monitoring procedures.
* The Executive Director of Quality & Medical Leadership as lead for medicines optimisation is directly accountable to the Trust Board.
* The Trust Drug and Therapeutics Committee is responsible for ensuring that the guidance meets current good practice.
* The Quality and Risk Management Committee has responsibility to ensure the guidance meets national and legal standards and the monitoring of key objectives.
* It is the responsibility of the Trust organisational management group to ensure guidance distribution, implementation and compliance throughout the organisation.
* Lead Clinicians/Team Managers must ensure that members of their teams involved with the management of acute behavioural disturbance including RT understand their responsibilities within this document. Individual health care professionals have a duty to implement the requirements of this document within their area of responsibility and a professional code of conduct. This duty extends to the supervision of support staff when duties are delegated.

**Responsibilities**

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| **Individual/staff groups** | **Responsibilities** |
| **All clinical staff potentially involved in RT** | * Should familiarise themselves with this policy * Should be suitably trained and competent to carry out their professional duties and to assess and manage potential and actual violence using de-escalation techniques, restraint, seclusion and RT as appropriate. * If involved in physically restraining service users must be proficient in “Physical Intervention” techniques and should have adequate immunisation against hepatitis B. * Should be trained to use and maintain the techniques and equipment required to undertake cardiopulmonary resuscitation. * Should ensure that following an emergency restraint and medication a short feedback session is held, and that the patient is debriefed. |
| **Consultants, senior and junior doctors** | * Assess the patient and take a drug history wherever possible, including allergies and adverse drug reactions. * Assess mental state and need for RT before prescribing. * Consider any advance directives before prescribing. * Establish a provisional diagnosis where appropriate to do so. * Follow the correct procedures in line with the patients status under the Mental Health Act 1983 * Be aware of potential drug interactions and the consequences of exceeding BNF dose limits. * Complete all relevant documentation. * Consult the MDT before prescribing. * Ensure that the nurse in charge is fully aware of any decisions regarding medication. * With the nurse in charge, agree and advise of the frequency of review of patient’s arousal levels, response to RT and ongoing physical monitoring. * Document decisions within the clinical record. * Ensure medication for RT is prescribed in the red outlined boxes on the **PRN section of the prescription chart** * If RT is administered, ensure full review of the patient after minimum 24 hours.(including prescribed medication and monitoring). |
| **Team Leaders** | * Ensure that all relevant staff are aware of this policy and other policies and guidance which relate to this policy. * Ensure that adequate training is given to allow staff to safely implement the guidelines. * Ensure staff routinely completes RT Monitoring Sheet and RT Checklist after incidents of RT. (Monitor through spot checks or routine audits of practice). * Ensure staff routinely report incidences of RT appropriately via Datix * Inform senior management if the policy is not being followed appropriately. * Ensure the equipment necessary for administration of IV flumazenil is available on the unit (in resuscitation bag). |
| **Nurse in charge of shift** | * Be fully aware of the contents of this policy and supporting policies and guidance before an incident arises. * Be aware of those clients most at risk of acute behavioural disturbance. * Assess risk and implement the policy when they feel it is appropriate. * Ensure that non-pharmacological methods are tried first. * Ensure that the incident is fully documented. * Ensure that the correct monitoring is done. * Continue to use de-escalation techniques throughout if appropriate. * Ensure appropriate handover to the subsequent shift nurse in charge and registered nurses on the shift. * Ensure appropriate information follows the patient to another unit/ward if it is necessary to move the patient during rapid tranquillisation or monitoring. * Ensure that vital sign monitoring forms (NEWS2 and Soft Measures) are appropriately completed for any service users who had RT during their shift. |
| **Registered nurses** | * + - * Support the nurse-in charge as above. * Ensure they are up-to-date with the policy and associated documents. |
| **Unregistered staff** | * Be suitably trained and competent to assess and manage potential and actual violence using de-escalation techniques, restraint, and seclusion (where appropriate). * Ask nursing colleagues and doctors for advice when necessary * Must report any concerns around vital signs or changes in the patient’s condition after IM RT to a qualified nurse. * Should be trained and competent to use and maintain the technique and equipment required to undertake cardiopulmonary resuscitation. |
| **Pharmacy staff** | * + - * Provide medicines information and advice as required for staff, carers (where appropriate) and service users.       * Ensure medication used for RT in this policy is available to all units where treatment may be carried out.       * Ensure that medication to treat emergencies which may occur with the use of RT is available to all units where treatment may be carried out. * In the event of a shortage of any medicine routinely used for RT, pharmacy will inform the units and issue guidance regarding alternative medicines that may be used. |
| **Learning and Development department** | * + - * Ensure all new starters attend RT training as part of Trust induction programme. |

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| **Part 2 – What needs to be done and who by** |

1. **INTRODUCTION**

* Acute behavioural disturbance can occur in the context of psychiatric illness, physical illness, substance abuse and/or personality disorder.1
* Efforts should be focussed on preventing episodes of violence and aggression. This means actively treating service users so that their mental health is well managed and doesn’t lead to episodes of violence and aggression that lead to the use of restrictive interventions such as RT
* There are a variety of approaches for managing acute behavioural disturbance which should be considered. These include; de-escalation, distraction techniques, negotiation, reviewing observation level, changing the settings (move to a quiet area, transfer to PICU and/or use of seclusion facility), physical intervention and prn oral medication. All of these strategies should be considered in each case5. Regular medication treatment plans should be effectively optimised to avoid the need for RT.
* The severity of the disturbed behaviour and associated risk to the service user or to other people and the apparent imminence of that risk, often determine the most suitable (reasonable and proportionate) strategies that are employed in a particular situation. Where the risk is assessed as both severe and imminent, RT may be employed.
* RT involves the use of medication given via the parenteral route. It is a restrictive intervention and must only be used if de-escalation and other preventative strategies including prn oral medication have failed and there is a serious potential for harm to the service user or other people if no action is taken. Continue to use de-escalation throughout a restrictive intervention.1
* RT should be used as a risk management strategy and its aim is not to treat any underlying illness or disorder. The aims of RT are three-fold:1,5
* To reduce suffering for the service user: psychological or physical (through self-harm or accidents)
* To reduce risk of imminent and serious harm to others by maintaining a safe environment
* To do no harm (by prescribing safe regimes and monitoring physical health)
* The goal is not to induce sleep or unconsciousness, but to quickly calm the severely agitated service user whilst enabling them to still be able to participate in further assessment and treatment.
* The minimum effective dose of medication for RT should be used.
* Particular caution is necessary if combining RT with physical intervention and seclusion. The indications and risks of RT must be understood by the staff involved. (Refer to section 13)
* RT is not a recognised clinical procedure in the British National Formulary (BNF) and has a limited evidence base. Expert clinical opinion may be used to support prescribing outside the limits set by the BNF or SPC.4 (Refer also to the ‘*Consensus Statement on High-Dose Antipsychotic Medication’ Royal College of Psychiatrists, November 2014 and BAP NAPICU*).
* Clinicians need to ensure that service users are not inadvertently given high doses and/or combinations of antipsychotics, which can potentially be very dangerous. This could occur accidentally through the use of PRN medication and/or stat dose medication, given in combination with regular medication.2,4
* The risk of QTc prolongation and associated arrhythmias is also significantly increased with rapid dose escalation.
* Despite the need for rapid and effective treatment, concomitant use of two or more antipsychotics (antipsychotic polypharmacy) should be avoided on the basis of risk associated with QT prolongation (common to almost all antipsychotics). This is a particularly important consideration in RT where the service user’s physical state predisposes to cardiac arrhythmia.4
* The National Prescribing Observatory for Mental Health (POMH-UK) in collaboration with the Royal College of Psychiatrists has produced audit-based Quality Improvement Programmes (QIP) on high dose antipsychotic prescribing, rapid tranquillisation and prescribing antipsychotics in people with learning disabilities.

1. **SERVICE USER’S EXPERIENCE**

* Staff must work in partnership with service users and carers and adopt approaches to care that respect service users’ independence, choice and human rights.
* In on-going assessment, the context of using RT needs to be understood as the RT use has the potential to affect the therapeutic relationship. Therefore, the reasons for using RT must be explained to the service user and their family/carers (as appropriate) at the earliest opportunity.
* Effective communication is important during the management of acute behavioural disturbance, especially where there are specific language and sensory communication requirements. The information provided should meet the individual’s communication needs, e.g. people with physical, sensory or learning disabilities or people with autistic spectrum disorders or people who do not speak or read English. The Trust guidance on *Accessible Information and interpreting policy* provides guidance on communication needs and the procedure on accessing the interpreting service.
* At any stage, involve service users in all decisions about their care and treatment and develop care and risk management plans jointly with them. If a service user is unable or unwilling to participate, offer them the opportunity to review and revise the plans as soon as they are capable and willing and, if they agree, involve their carer(s).
* Service users should be offered the opportunity to discuss their experiences and to write an account of this. The narrative should be included in the electronic patient record (EPR), thereby supporting the underlying principles of recovery and inform advance decisions or advance statements.
* The care coordinator must ensure that the individual patient’s advance directive (legally binding) is notified to the prescribers during the acute phase of illness.

1. **ADVANCE DECISIONS / ADVANCE STATEMENTS**

* Service users identified to be at risk of disturbed or violent behaviour should be given the opportunity to have their refusals of treatment or wishes recorded in the form of an advance decision or advance statement. This should fit within the context of their overall care and should clearly state what intervention(s) they would refuse should they lack capacity in the future. This document should be subject to periodic review. *(*Revised *Mental Health Act Code of Practice*, 2015).
* Where there is an advance decision documented in the service user’s care plan for a refusal of medication in the event of acute illness, this should be adhered to if deemed to be valid and applicable. Any concerns around the validity and applicability of an advance decision should be addressed to the Directorate Manager (See Mental Health Legislation and Advance Statements and Advance Decisions – Making your wishes known form and guidance for further information; available on the Hive:*[Advance Decisions to Refuse Treatment and Advance Statements Policy and Procedure](http://trustspace/DocumentCentre/Documents/Communications/Leaflets%20and%20Publications/Advance%20Statements%20and%20Advance%20Decisions%20-%20Making%20your%20wishes%20known.pdf)*

(Alternatively obtain a copy from MHA Office Staff)

* Information about a person’s wishes and feelings regarding treatment, particularly any written statements must be taken in to consideration by decision makers when they are making best interest decisions on behalf of a person who lacks capacity. Advance statements of wishes are not legally binding on the Trust and, although they should be taken in to account, a person cannot demand a particular treatment that is not deemed to be clinically appropriate.

**9. ASSESSMENT OF THE CAUSE OF DISTURBED BEHAVIOUR**

* The manifestation of violence and aggression depends on a combination of intrinsic factors, such as personality characteristics and intense mental distress and extrinsic factors, such as the attitudes and behaviours of surrounding staff and service users, the physical setting and any restrictions that limit the service user's freedom. The impact of violence and aggression is significant and diverse, adversely affecting the health and safety of the service user, other service users in the vicinity, carers and staff.
* Consider physical causes e.g. an acute confusional state, intoxication, head injury, epilepsy, infection or metabolic disturbance. The possibility of hypoglycaemia must be considered as it requires urgent treatment. Consideration must also be given to any concurrent medication and recent use of any illicit substances. This includes potential interactions and leads to altered dose requirements and potential side effects.
* Attempt to understand the situation that led up to the disturbed behaviour. For further guidance refer to the Trust *Violence & Aggression Policy.*
* Occasionally violence may not be the result of a disturbed mental state and in this instance calling the police may be the most appropriate action.

**10. DE-ESCALATION AND PREVENTION OF VIOLENCE AND AGGRESSION**

(Refer to Trust Violence and Aggression Policy)

First step is to ensure **safety** of the service user, staff and others on the ward/unit. This may involve:

* Making sure a safe number of staff members are available
* Considering service user’s preferences
* Considering previous successful intervention
* Moving the service user to a low stimulus environment
* Physical interventions
* Considering past history of adverse reactions to medication
* Ensuring availability and accessibility of resuscitation equipment
* Ensuring availability of flumazenil

**De-escalation** techniques (e.g. talking, distraction, time away or use of a low stimulus environment) must always be used prior to using a restrictive intervention (Refer to Trust *Violence & Aggression Policy)*. Even if this may not prevent the need for RT, it may help preserve the therapeutic relationship and improve safety.

Staff should:

* Maintain an adequate distance
* Ensure the environment is conducive to calmness (e.g. low stimulation levels, presence of other service users)
* Move the service user to a quieter place.
* Explain interventions and be calm and self-assured
* Use non-threatening, non-verbal communication
* Converse and try to develop a therapeutic relationship with the service user throughout
* Check for any Advance Statements (including crisis plan) or Advance Decisions to Refuse Treatment
* Offer service users with a history of violence or aggression psychological help to develop greater self-control and techniques for self-soothing.

**Individualised pharmacological strategy**

* A multidisciplinary team that includes a psychiatrist and a specialist pharmacist should develop and document an individualised pharmacological strategy for using regular and prn medication to calm, relax, tranquillise or lightly sedate service users who are at risk of violence and aggression, as soon as possible after admission to an inpatient psychiatric unit.
* If a psychiatrist is required to attend, it is vital that they obtain as much history as possible from the service user and other sources before medication is given, as the opportunity to make the diagnosis may be lost if the service user is sedated before an understanding of their mental state is reached. However, the immediate safety of the service user and the staff is of prime concern and if a doctor is not present, in an emergency it may be necessary to administer previously prescribed medication without the presence of a doctor. Should this situation arise, the service user’s doctor/duty doctor should be informed and requested to attend as soon as practical. Due consideration should be paid to potential non psychiatric causes for the disturbed behaviour eg organic, psychological, specific intoxication or withdrawal state.
* The multidisciplinary team should review the pharmacological strategy and the use of medication at least once a week and more frequently if events are escalating and restrictive interventions are being planned or used. The reviews should be recorded and include:
* clarification of target symptoms
* the likely timescale for response to medication
* the total daily dose of medication, prescribed and administered, including prn medication
* the number of and reason for any missed doses
* therapeutic response
* the emergence of unwanted effects
* If RT is used, the team doctor should review service user’s medication before a second dose is given if necessary and at least within 24 hours.
* Prescribing prn (pro re nata, when required) oral medication may be part of a strategy to de-escalate or prevent situations that may lead to violence and aggression. However, prn medication used alone is not de-escalation.
* Prn medication should not be prescribed routinely or automatically on admission
* Tailor prn medication to individual need and discuss with the service user ~~if~~ possible
* Ensure there is clarity about the rationale and circumstances in which prn medication may be used and that these are included in the care plan. The indication should be specified on the prescription chart
* If two medications are intended to be given at the same time this should be clearly stated.
* Ensure the maximum daily dose is specified and does not inadvertently exceed the maximum daily dose stated in the BNF when combined with the person's regular dose, any stat dose and their RT dose
* Only exceed the BNF maximum daily dose (including prn dose, the regular dose, any stat dose and RT dose) if this is planned to achieve an agreed therapeutic goal, documented, and carried out under the direction of a senior doctor
* Ensure the time interval between prn doses is specified
* The multidisciplinary team should review prn medication at each MDT review, or sooner if clinically indicated. If prn medication is to be continued, the rationale for its continuation should be included in the review.
* Physical observations must be monitored in accordance with recommendations from the MDT. This must be documented in the electronic patient record (EPR)
* The prn side of the prescription chart has a section (amber) for prescribing oral medication as part of de-escalation. Under ‘Additional instructions’ it states: Complete physical monitoring as per MDT decision. This, together with the route of administration i.e. oral, is pre-printed

**11. CAUTIONS IN THE USE OF RT & CIRCUMSTANCES FOR SPECIAL CARE**

The service user should be assessed considering the following factors:1,2,3,4,5,6,7,13,15

* **Concurrent treatment** including prescribed medicines, those bought over-the-counter and herbal products.
* **Co-existing medical illnesses** e.g. epilepsy, cardiac ~~and~~ respiratory conditions, chronic liver and/or kidney conditions.
* The presence of **congenital prolonged QTc syndromes**. The concurrent prescription or use of other medication that may lengthen QTc interval both directly and indirectly. (Refer to Appendix 11).
* Use of **benzodiazepine** in preference to antipsychotics in service users with cardiac disease as these are safer, but be aware of accumulation. Avoid benzodiazepine in service users who are physically unwell or who have significant respiratory impairment and consider other options in service users who have a significant tolerance to benzodiazepines.
* The presence of certain **disorders affecting metabolism** such as hypo- and hyperthermia, stress, extreme emotions and extreme physical exertion.
* **Alcohol or illicit drug use**: due to serious risk to life, service users who are heavily sedated or using illicit drugs or alcohol should be observed more closely. Efforts should be made to try and clarify what substances the person has misused. Although the benzodiazepines are the preferred first line option, this will not be appropriate in people who are tolerant to benzodiazepines or who are thought to have recently abused benzodiazepines or other respiratory depressants (e.g. barbiturates, heavy alcohol use). In service users who are thought to have misused amphetamines and related substances e.g ecstasy it is advisable to avoid using haloperidol and potentially other antipsychotics, due to their potential to affect cardiac rhythm.
* For **older adults** use smaller doses of medication. Refer to Appendix 7- Algorithm for the use of Rapid Tranquillisation (RT) (IM only) in Older Adults (65+ years).
* Many people with **learning disabilities** are especially sensitive to the side-effects of psychotropics. It is good practice to start at lower doses and increase more slowly than usual in general psychiatric practice. They only should be treated with the medications once psychological and other interventions have failed or they are at severe risk to themselves or others
* **Children and Adolescents (≥12 to ≤18 years) – Refer to Appendix 8**
* **Pregnancy** – a risk-benefit analysis must be undertaken in cases where service users are pregnant, as there is insufficient evidence on the safety of RT in pregnancy. (Refer to Appendix 12 - Drug Choice in Pregnancy). For further advice refer to the Trust *Care and Management of Pregnant Service Users Policy -* There is a lack of evidence for the efficacy and safety of RT/prn in pregnancy.Therefore, pregnant women requiring RT should be treated according to the same principles as non-pregnant women but:
* When choosing any RT consider an antipsychotic or a benzodiazepine with a short half-life to avoid accumulation.
* The safety of promethazine has been demonstrated in pregnancy in non-RT scenarios
* During the perinatal period care should be managed in close collaboration with the paediatrician and anaesthetist.
* A pregnant woman should never be put in seclusion and should not be left alone after rapid tranquilization until examined by a midwife
* Following any rapid tranquilization a pregnant woman should be examined by a midwife to check the foetal heart rate and to check whether she has gone into labour
* The relative risks of the different RTs versus leaving the pregnant service user untreated are difficult to assess due to poor evidence. Concerns may be more relevant to the ongoing use of medication rather than single dose of RT. The direct effect of RT on the embryo/foetus are likely to be minimal but the risks associated with restraint and on-going regular medicines are likely to be more significant.

**12. MEDICINES USED FOR RT**

* Staff should take into account any Advance Statements (including the service user’s crisis plan) that express preferences for treatment. Advance Decisions to refuse treatment must also be considered but may be overridden if the service user is detained under the Mental Health Act (refer to section 8 above) - see Advance Statements and Advance Decisions – Making your wishes known form and guidance for further information; available on the Trust intranet. Alternatively obtain a copy from MHA Office Staff.
* Always be clear about mental health act status prior to treatment.
* If treating a service user who lacks capacity against their will, it would be under the provisions of the Mental Capacity Act 2005. The medical records should contain a clear Assessment of Capacity Form for that particular treatment. A Best Interest Decision Form should also be completed to demonstrate that the treatment is being provided in the service user’s best interests as they lack capacity to make the decision.
* The Trust *Policy on Consent to Examination, Care and Treatment* and the guidance of the *Mental Health Act Code of Practice 2015* and the *Mental Capacity Act 2005* should be followed. Any departure from this guidance must be clearly recorded and justified as being in the service user’s best interest.
* If medication is to be given without the consent of the service user; remember to check that medication is covered by MHA ‘consent to treatment’ provisions and is authorised under a Form T3; if it is not, the Responsible Clinician should complete a Section 62 to certify that the treatment is of urgent necessity. If unsure, consult your local Mental Health Act Office.
* Before administering any intramuscular medication (IM), staff should inform the service user what medication needs to be given and why and offer them the opportunity to take the medication orally.
* If administering IM medication, please refer to the Trust *Injections Procedure* This provides detailed guidance on how to safely administer injections, including site, technique and equipment required.
* This guideline assumes that prescribers will use a medicine's SPC and/or BNF to inform decisions made for individual service users. The most recent NICE Guideline NG101 and BAP NAPICU5 guidance recommends some medicines for indications for which they do not have a UK marketing authorisation at the date of consultation. If there is good evidence to support that use, the prescriber should follow relevant professional guidance, taking full responsibility for their decision. The service user (or those with authority to give consent on their behalf) should provide informed consent, which should be documented. See the General Medical Council's prescribing guidance[: Prescribing Unlicensed Medicines for further information](http://www.gmc-uk.org/guidance/ethical_guidance/14327.asp) and HPFT Medicines Policy (including unlicensed and off-label Medicines)
* It is sometimes necessary to knowingly exceed BNF limits and use drugs outside of their marketing authorisation (off-label) for the purpose of RT. The rationale for this must be recorded in the care plan and monitoring of the service user’s condition must be accordingly specified.
* The need for medication should be re-assessed on a regular basis within the agreed and on-going treatment plan.
* If medication is given, it is paramount to allow time for the drug to work before giving further doses by either oral or intramuscular means.
* Seek advice from the Consultant Psychiatrist at any stage if there is any doubt about current care / treatment plan / risk strategy.
* To support intervention, the Agitation-Calmness Evaluation Scale (ACES)should be used to generate and develop a score over time, in order to monitor effectiveness of treatment. (Refer to Appendix 2).
* When prescribing medication for use in RT, write the medication in the RT (red) section on the prn side of the prescription chart. Under ‘Additional instructions’ it states: Complete RT Monitoring Sheet & RT Checklist. This together with the route of administration i.e. IM is pre-printed.
* A combination of RT and seclusion is not absolutely contraindicated providing that the following are established:
* If the service user is secluded, potential complications following RT are particularly serious and must be given full consideration.
* The service user must be monitored continuously by a trained member of staff.
* Undertake risk assessment and consider ending seclusion when RT has taken effect.
* The Medicines and Healthcare products Regulatory Agency (MHRA) recommends the use of licensed medicines whenever such alternatives are available. The prescriber’s responsibility and potential liability are increased when prescribing both licensed medications for unlicensed indications or beyond maximum licensed doses (off-label), as well as when prescribing unlicensed medicines. The use of many medicines in children under 18 is outside of their UK licensed or off-label (Appendix 8).

**12.1 RT in adult patients (18-65 years old)** – refer to Appendix 6

* When deciding which medication to use, take in to account:
* The service user’s preferences or Advance Statements and Advance Decisions
* Pre-existing physical health problems, vital signs (including postural BP) and pregnancy
* Possible intoxications/withdrawal from substances
* Previous response to these medications, including adverse effects and efficacy
* Potential for interactions with other medications
* Onset of action of medicine as this may influence the choice.
* Polypharmacy within a class of medication should be avoided
* Total daily dose of medications prescribed and administered; to include regular, any stat doses and prn. Ensure service users are not inadvertently given high doses of antipsychotics, which could potentially be very dangerous. This could occur accidentally through the use of PRN medication given in combination with regular medication and/or stat doses
* Whether or not the service user has received an antipsychotic before and takes it regularly.
* Consider any oral antipsychotic(s) taken within the last 24 hours or depot antipsychotic injections given in the past 6 weeks
* The plasma concentration of an antipsychotic is affected not only by the total dose, but also the route of administration and its rate of elimination. Elimination depends on a number of factors including drug interactions and the age of the service user. Absorption from intramuscular (IM) administration can happen far more rapidly when a service user is agitated, excited or physically overactive.
* There may be instances where a prescriber makes a clinical decision to use an antipsychotic first-line as opposed to the recommended lorazepam or promethazine, based on individual circumstances e.g. marked violence, acute psychosis associated with serious risks.
* If there is evidence of cardiovascular disease, including a prolonged QTc interval, or no electrocardiogram (ECG) has been carried out, avoid IM haloperidol combined with IM promethazine and use IM lorazepam instead. If an ECG is not available, the prescriber should consider the risks and benefits of using this treatment and be able to justify their prescribing decision, as it may be considered an off-label use.

An ECG should be carried out at the earliest opportunity.

* The SPCs for both haloperidol injection8 and haloperidol oral9 state that a baseline ECG is recommended prior to treatment in all patients. Service users commonly require treatment with haloperidol for immediate relief of critically disturbed behaviour or emotions. Although an ECG is recommended prior to treatment, the patient’s condition, for which the haloperidol treatment is required, may of itself not allow an accurate ECG recording to be obtained1. The Trust concurs with its clinicians that the competing requirements of maximal behavioural safety and maximal cardiac safety are, at times, substantially irreconcilable. Under such circumstances the treating clinician will make a judgement whether the patient’s interests are best served by administering haloperidol within its licensed terms even though an ECG is not available. The large and demonstrable beneficial effect of haloperidol on behavioural and emotional disturbance and the small and poorly quantified risk of cardiac abnormality may be taken into account. It is recognised that instances will arise where the service user’s needs are best served by the urgent administration of haloperidol even in the absence of a pre-treatment ECG. This recognition does not however reduce the force of whatever other authoritative statements apply to the use ofhaloperidol outside critical care situations. Refer to Appendix 11 Drugs known to prolong QT interval.

**12.2 RT in older adults (> 65 years old)** - refer to Appendix 7

The use of RT in older service users is infrequent and only used in an extreme emergency. Consultant psychiatrist must be consulted prior to prescribing any IM medication for RT for older adults. All other options, including non-pharmacological and oral medication such as lorazepam or promethazine and/or antipsychotics (haloperidol, risperidone, olanzapine) should have been exhausted prior to prescribing IM medication for RT. In addition to information written above regarding RT of adult patients, it is important to consider that older adults may:

* Require smaller doses of medication
* Have altered levels of metabolism and may be more frail
* Have pre-existing general medical illnesses and be taking several medications (check medical history is up to date)
* Be more likely to develop extrapyramidal side effects and other adverse effects e.g. both antipsychotics and benzodiazepines may affect mobility and increase the risk of falls
* If suffering from dementia, be more likely to develop increased cognitive impairment with high doses of medication
* Be naïve to antipsychotics and/or benzodiazepines.

**Dementia**

People with dementia or a history of cerebrovascular events should only be prescribed antipsychotics for the management of agitation, violence and aggression after careful consideration, and only where the person is severely distressed or there is an imminent risk of harm to others, and where lorazepam alone is insufficient or inappropriate. In these situations the decision to prescribe antipsychotics and the rationale should be documented in the notes. Of the different symptoms that constitute behavioural and psychological symptoms in dementia, only physical aggression has been shown to respond to medication. NICE states that once certain conditions have been met, “People with Alzheimer’s disease, vascular dementia, mixed dementias or DLB with severe non-cognitive symptoms (psychosis and/or agitated behaviour causing significant distress) may be offered treatment with an antipsychotic drug”.

**12.3 Intravenous (IV) medication** **(not included in the RT algorithms)**10,11,12

* In view of the safety considerations11,12 and the practical considerations of restraint and administration of boluses, intravenous (IV) RT is **NOT** recommended.
* IV administration of benzodiazepines or haloperidol should **NOT** normally be carried out except in **very exceptional circumstances** i.e. a VERY hostile and disturbed service user.
* The decision to use IV medication should **NOT** be made by junior medical staff in isolation and can **only be used in consultation with the Consultant Psychiatrist who has previous experience of using IV interventions (on-call Consultant Psychiatrist if out-of-hours)**. Medication for RT can only be prescribed by a doctor.
* Reasons for using the IV route must be clearly specified and recorded in the EPR.
* The IV route of administration can lead to high concentrations of drug in the heart muscles and should always be avoided in older service users.
* Be aware of any past history of respiratory depression, acute dystonia or cardiovascular compromise.
* Nursing staff working within the Trust are not trained to administer IV medication and hence administration must be carried out by an appropriately trained doctor.
* If immediate tranquillisation is essential then IV administration may be required. If it is used, medical and nursing staff must be appropriately trained to recognise and manage symptoms of respiratory depression, acute dystonia and cardiovascular compromise e.g. arrhythmias, significant changes in blood pressure and cardiovascular collapse.
* If IV medication is used, the service user must be managed on continuous observation for a minimum of three hours following RT or longer if considered necessary. The service user must not be left unattended; emergency response equipment must be immediately available and staff must be trained in immediate life support (ILS).

**12.4 ECGs**

* Before giving any antipsychotics it is recommended that a service user has a baseline ECG2.
* If there is evidence of cardiovascular disease, including a prolonged QTc interval, or no electrocardiogram (ECG) has been carried out, avoid IM haloperidol combined with IM promethazine and use IM lorazepam instead.5 If an ECG is not available, the prescriber should consider the risks and benefits of using this treatment and be able to justify their prescribing decision, as it may be considered an off-label use. An ECG should be carried out at the earliest opportunity.
* The SmPCs for both haloperidol injection8 and haloperidol oral9 state that a baseline ECG is recommended prior to treatment in all patients. Service users commonly require treatment with haloperidol for immediate relief of critically disturbed behaviour or emotions. Although an ECG is recommended prior to treatment, the patient’s condition, for which the haloperidol treatment is required, may of itself not allow an accurate ECG recording to be obtained1. The Trust concurs with its clinicians that the competing requirements of maximal behavioural safety and maximal cardiac safety are, at times, substantially irreconcilable. Under such circumstances the treating clinician will make a judgement whether the patient’s interests are best served by administering haloperidol within its licensed terms even though an ECG is not available. The large and demonstrable beneficial effect of haloperidol on behavioural and emotional disturbance and the small and poorly quantified risk of cardiac abnormality may be taken into account. It is recognised that instances will arise where the service user’s needs are best served by the urgent administration of haloperidol even in the absence of a pre-treatment ECG. This recognition does not however reduce the force of whatever other authoritative statements apply to the use of haloperidol outside critical care situations. Refer to Appendix 11 Drugs known to prolong QT interval.
* During therapy, the need for ECG monitoring (e.g. dose escalation) should be assessed on an individual basis. Whilst on therapy, the dose should be reduced if QTc is prolonged and haloperidol should be discontinued if the QTc exceeds 500ms.8

**12.5 Medications NOT recommended for RT**

* IM or oral chlorpromazine: should not be administered due to local irritant effect, if given IM, increased risk of cardiovascular complications, causes hypotensive effects, especially at RT doses, erratically absorbed and effect on QTc intervals suggests it is unsuitable.10
* IM diazepam: should not be administered IM due to its erratic pattern of absorption and lack of evidence for use in RT5
* IM depot antipsychotics: slow onset of action
* IM midazolam: should not be administered due to the risk of respiratory depression5
* IM lorazepam plus IM promethazine: this combination is not recommended due to lack of evidence for efficacy5
* IM zuclopenthixol acetate: due to slow onset of action16
* IM clozapine: it is not intended to be used as RT. IM Clozapine is a short-term intervention which may be used to initiate clozapine in service users with treatment-resistant schizophrenia who refuse oral clozapine, with a view to convert to oral clozapine as soon as possible.(Refer to *Guidelines for the use of intramuscular clozapine treatment for inpatients*)

**Zuclopenthixol acetate (Clopixol AcuphaseTM)1,5,16**

* **Zuclopenthixol acetate is NOT recommended (by HPFT/NICE Guidelines 2015/BAP NAPICU 2018) for use in RT,** due to both its delayed onset of action and long duration of action.
* It may be considered in the management plan for service users with a psychotic or manic illness who fail to respond to repeated RT, may require repeated RT based on presentation/compliance, or in those who have a history of a successful response to the drug, particularly where duration of effect of 2-3 days is desirable.
* It should be prescribed in the **‘Once Only’** section of the prescription chart. Care must be taken not to confuse zuclopenthixol acetate with zuclopenthixol decanoate, as the latter is a long-acting depot preparation.
* The usual dosage is 50-150 mg (1-3ml), repeated if necessary after 2 or 3 days. Some patients may need an additional injection between 1 and 2 days after the first injection. The maximum dose is 400mg in 2 weeks.16
* The onset of sedation with zuclopenthixol acetate starts at 1 to 4 hours, peaks at 8 to 36 hours and is mainly complete by 48 to 72 hours. A second dose should not be given within 24 hours of the first dose. Do not exceed 4 injections of zuclopenthixol acetate. Assess/monitor physical health parameters every 4 hours post administration of zuclopenthixol acetate.16
* It must not be administered to those without any previous exposure to antipsychotic medication.
* It may have a role in the ongoing management of risk of violence once tranquillisation has been satisfactorily achieved, in order to minimise the likelihood of repeated injections. It is important to consider the pharmacokinetics of other drugs when prescribing zuclopenthixol acetate. For example, caution is necessary in a service user who has recently received a dose of depot antipsychotic which has not yet reached peak levels.
* It should be used with caution in those who are struggling, who are very sensitive to extrapyramidal side-effects (EPSE), those with cardiac disease, hepatic or renal impairment and in pregnancy.
* It should be used with caution in older adults. It must be avoided in those who are frail, or have a diagnosis of dementia and its use confined to individuals who are clearly functional, physically fit, with a chronological age greater than 65 years. If in doubt contact a senior member of medical staff for further advice.

**13. RISKS ASSOCIATED WITH RT**

There are specific risks associated with the different classes of medications used in RT. When combinations are used, risks may be compounded. See table below10:

|  |  |  |  |
| --- | --- | --- | --- |
| **Medication used for RT** | **Serious side effects/risks of RT** | **Symptoms/Signs** | **Management** |
| Antipsychotics | **Acute dystonia** (including oculogyric crisis) | Severe painful muscular stiffness | Procyclidine 5mg IM. Repeat after 10 mins if needed |
| Benzodiazepines  Sedative agents | Reduced **respiratory rate** or arrest | Reduced respiratory rate (<10 breaths/min) or oxygen saturation (<90%)  Respiratory arrest  Loss of consciousness | * Give oxygen, raise legs, ensure patient not facing down * Call advanced emergency care * If **benzodiazepine-induced** give flumazenil IV (refer to Appendix 6) * If **other sedative-induced**, transfer to medical bed and ventilate mechanically |
| Benzodiazepines combined with antipsychotics | Irregular or slow **pulse** | Arrhythmias or pulse below 50/min | Refer to specialist medical care immediately |
| Antipsychotics or combination of antipsychotics & benzodiazepines | Fall in **blood pressure** | Orthostatic drop >30 mmHg or diastolic <50 mmHg | Have patient lie flat, tilt bed towards head, raise legs, monitor closely |
| Antipsychotics | **Neuroleptic malignant syndrome (NMS)** | Increased temperature, fluctuating blood pressure, muscular rigidity, confusion/altered consciousness | * Withhold antipsychotics (risk of arrhythmias and renal failure) * Check creatine-kinase urgently * Liaise with medical team immediately |
| Any medication used for RT or combinations | **Excessive sedation** | Sedation | Monitor closely |

* All emergency equipment must be maintained in accordance with Trust Resuscitation Policy and staff should be familiar with their use.
* Staff must be trained in emergency life support.
* Paradoxical agitation may result from antipsychotic or benzodiazepine treatment.
* All units where RT may be carried out MUST stock IV flumazenil (Appendix 9).
* Team Leaders must ensure that the equipment necessary for administering this medication is also available on the unit.
* Please note that HPFT nurses are NOT approved to administer IV medication and such medication must therefore be administered by a doctor.

**14.** **RT DURING SECLUSION**

* If RT is needed while a service user is secluded, undertake it with caution.
* Be aware of and prepared to address any complications associated with RT.
* The service user should be monitored by ‘within eyesight’ continuous observation by a suitably trained individual. Refer to the Trust *Seclusion & long term segregation Policy*.
* Undertake a risk assessment and consider ending seclusion when RT has taken effect.

**15. PHYSIOLOGICAL / SAFE AND SUPPORTIVE OBSERVATION**

Staff should ensure that the minimum standards of physiological / safe and supportive observation are maintained as described in Appendix 2 and are part of a comprehensive approach to the management of risks associated with responding to disturbed / aggressive behaviour, involving medication and physical interventions.

**16. PHYSICAL MONITORING**

Physical monitoring (NEWS2 chart) should be carried out following the schedule below and recorded. Where it is difficult to undertake this monitoring due to service user unwillingness, a more subjective assessment is required using SOFT Measures: Visual Assessment (Refer to Appendix 2).

|  |  |  |
| --- | --- | --- |
| **Physical Parameters** | | Monitoring Interval |
| **Alertness using ACES Scale** | | Monitor at least **every hour** until there are no further concerns about physical health status (service user is active and ACES 7 or below)  Monitor every **15 minutes** if BNF max. dose exceeded or service user :   * is asleep or sedated * has taken illicit drugs or alcohol * has a pre-existing physical health problem * has experienced any harm as a result of any restrictive intervention * concurrent prescribing of other medications * Mobility is affected   Monitor **continuously** if the patient was tasered and/or received CS gas by the police. |
| **NEWS 2**   * + **Respiratory rate**   + **Pulse**   + **Blood Pressure**   + **Oxygen Saturation SpO2**   + **Temperature**   + **Hydration** | **SOFT Measures** |
| **Monitor for risk of falls and deterioration in mobility**  **Ensure fluid intake is maintained. Fluid intake and output should be monitored.** | | |

* Ideally, for any inpatient there should be baseline monitoring values within 24 hours of admission – refer to HPFT Physical Health Policy against which one can judge any post-RT abnormal observations.
* An ECG and haematological monitoring should be performed at the earliest opportunity where parenteral antipsychotics are used. Hypokalaemia, stress and agitation place the patient at risk of cardiac arrhythmia. ECG monitoring is formally recommended for all patients who receive haloperidol (refer to page 16).
* If ACES score is 8/9 or there are any signs of physical deterioration proceed as per NEWS2/Soft measures escalation process and inform the on-call doctor (see Appendices 3 & 4). Members of staff must know the procedure for accessing emergency assistance.
* If medication is used for RT, the resuscitation equipment (refer to Trust *Resuscitation Policy*), emergency medication, including IV flumazenil and equipment for carrying out monitoring of the physical parameters must be available.
* If current BNFmaximumdoses are exceeded, it is particularly important that frequent and intensive monitoring of a service user is undertaken. This must be specified and recorded in the relevant EPR. Pay particular attention to regular checks of airway, respiratory effort, changes in level of consciousness, pulse, blood pressure, temperature and hydration.
* The service user’s willingness to comply/allow monitoring physical parameters must be kept in mind when prescribing and administering RT medicines.

**17. DOCUMENTATION / RECORDING**

The professional in-charge must ensure that a comprehensive and contemporaneous account of the incident is made in the service user’s EPR. This should include:

* Antecedents/events leading up to the incident
* De-escalation techniques used
* Legal basis for use of RT (e.g. capacity to consent, consented or not, advance statements/crisis plans, advance decisions to refuse treatment, MHA status etc.)
* Drugs and doses administered (including if above BNF or NICE recommended doses)
* Reasons for the use of alternative medication (if necessary)
* Physiological observations and time of monitoring
* Response of the service user
* All physical care interventions (e.g. food/fluids offered and intake, toilet/washing etc.)

Following the incident the professional in-charge should also ensure that:

* Staff have completed a Rapid Tranquillisation (RT) Monitoring Sheet (Appendix 15) for all individuals who are administered medication for RT. This form must be scanned in to the relevant EPR.
  + Each time RT is carried out staff must complete the RT Checklist (Appendix 14) and scan this in to the relevant EPR.
* The risk assessment and care plan are reviewed within 24 hours following RT
* If the service user is transferred to another unit the details of RT must be made available to the receiving team
* An incident report (Datix) is completed. Details of the Datix report and RT Checklist must be forwarded to the Team Leader and Consultant Psychiatrist. Record the reference number in the EPR.

**18. SERVICE USER DE-BRIEF**

* After the treatment of an acute behavioural disturbance the service user should be de-briefed. This should be documented in the relevant EPR, including refusal of support if that is the case. The service user should be offered the opportunity to write an account of the incident, including refusal of support.
* Opportunities will be offered to the service user involved, and their relatives/carers (if appropriate) to discuss the incident with staff. Such a discussion can give the service user a chance to consider factors that led to the incident and to learn from the incident. Service users should be advised of their right to talk about the incident with an independent mental health advocate, family member or another representative. An interpreter will be used if necessary.
* Other service users, who were not directly involved in the incident, but who may have witnessed the incident, should also be given the opportunity to discuss this with staff.
* As an outcome of the above, the support plan should be updated

**19. STAFF POST- INCIDENT REVIEW (DE-BRIEF)**

* All staff involved in the incident will be offered the opportunity to participate in a post- incident review (de-brief)/SWARM huddle and reflective practice The key function of this process is to improve future practice, by reviewing what has happened - this may focus both on what has worked well, and what has not worked well.
* Post-incident reviews (de-briefs) can have both educational and operational objectives. De-briefing is a sort of “defusing” and it aids the processing of a traumatic event with the aim of reducing psychological damage and enabling staff to be able to return to normal work duties as quickly as possible. In this therapeutic approach, emphasis is placed on the importance of the narrative to reconstruct what happened. This cognitive reconstruction of events is performed in groups so that there is a shared meaning.
* A post-incident review would ideally take place immediately after an incident involving RT with all staff involved (before the staff responding from other wards return back to their ward). Any suitably experienced member of staff can act as the facilitator. The starting point should be to ask:
  + - Is everyone ok? Does anyone need medical attention?
    - What happened?
    - Did any factors lead to the use of physical intervention / seclusion / RT being necessary? (antecedents / triggers / behaviour)
    - What did we do well?
    - What could have been done better?
    - On reflection, given the situation again, how might the team respond differently?
    - What reporting and documentation needs to be done, who is going to do what? For example: incident reporting / updating risk management plan and care plan / informing relevant individuals.
    - Consider when might be an appropriate time and who might be the best person to approach the service user and offer de-brief. This may not be immediately following the incident but must always be offered and recorded in the relevant EPR.

**20. Training and Awareness**

* A copy of the policy will be circulated to all senior managers to ensure staff familiarise themselves with this policy.
* A copy will be available on the Trust’s intranet.
* All staff involved in prescribing, administration and monitoring of RT must ensure that their knowledge is up-to-date in relation to RT.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course** | **For** | **Renewal Period** | **Delivery Mode** | **Contact Information** |
| RESPECT training Module 4 | All Registered nurses and HCAs working in inpatient settings | Annually | Taught course  (4 days) | For taught courses, contact the Learning & Development Team:  [hpft.learning@nhs.net](mailto:hpft.learning@nhs.net) |
| RESPECT training Module 5 | All Registered nurses and HCAs working in units with seclusion and LTS facilities (eg: PICU, MSU, LSU, A&T units) CAMHs Acute Assessment | Annually | Taught course  (2 days) | For taught courses, contact the Learning & Development Team:  [hpft.learning@nhs.net](mailto:hpft.learning@nhs.net) |
| Intermediate Life Support  (Incorporates Resuscitation Training) | Registered nurses and Medical Staff working in inpatient settings | Annually | Taught course  (1 day) | For taught courses, contact the Learning & Development Team:  [hpft.learning@nhs.net](mailto:hpft.learning@nhs.net) |
| Basic Life Support  (Incorporates Resuscitation Training) | Community Support Workers  Support Workers in In-patient Units | Annually  Annually | Taught course  (half day)  Taught course  (half day) | For taught courses, contact the Learning & Development Team:  [hpft.learning@nhs.net](mailto:hpft.learning@nhs.net) |
| First Aid & Resuscitation | Tertiary Learning Disabilities Staff only | Annually | Taught course  (1 day) | For taught courses, contact the Learning & Development Team:  [hpft.learning@nhs.net](mailto:hpft.learning@nhs.net) |
| Management of Aggression / RT | Doctors | Bi-annually | Taught (30 mins) as part of induction | Local academic leads |
| Management of Aggression / RT | Doctors | Bi-annually | Taught (1 hour) as part of weekly teaching sessions | Local academic leads |
| Management of Acute Behavioural Disturbance including RT | All staff involved with restrictive interventions | Annually | Taught course (half day) | Contact Chief Pharmacy Technician – Pharmacy  [andrew.smith59@nhs.net](mailto:andrew.smith59@nhs.net) |

* Training for medical staff will be addressed via medical induction and CPD.
* Lead clinicians/ward/team leaders are responsible via supervision that their staff attend the relevant training and updates. Records of training attended must be kept.
* Individual members of staff are responsible for attending the required training at the required intervals.
* The training schedule applies to the indicated staff groups whether temporary or permanent.

**Associated Training**

* Clinical Risk Assessment and Management
* Revised MHA Code of Practice 2015
* Mental Capacity Act 2007
* Equality, Diversity and Human Rights
* Cultural Competence

For further information refer to the appropriate procedural document.

**21. Process for monitoring compliance with this document**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key process for which compliance or effectiveness is being monitored | Monitoring method (i.e. audit, report, on-going committee review, survey etc.) | Job title and department of person responsible for leading the monitoring | Frequency of the monitoring activity | Monitoring Committee responsible for receiving the monitoring report/audit results etc. | Committee responsible for ensuring that action plans are completed |
| The organisation has approveddocumentation which describes the process for managing risks associated with RT | Review of policy | Chief Pharmacist | Policy checked annually | Drug & Therapeutics Committee (DTC) | DTC reports annually to Quality and Risk Management Committee |
| Demonstrate compliance with monitoring of the minimum requirements for:   * prescribing guidelines for RT, being correct and directive * administration of RT: * baseline recording monitoring, with clear process of action required for observations, including timeframes, when patients have received RT * post incident follow-up, reflected in support plans, within 72hrs of incident | Audit:  Pharmacy Team  Nursing Team  PACE Team | Chief Pharmacist    Deputy Director of Nursing | Annually | 1. Making Our Services Safer Meeting Practice Governance 2. DTC reports 3. Annually to Quality and Risk Management Committee | Drug & Therapeutics Committee (DTC) |

The Trust participates in the national POMH UK benchmarking audits on RT

**22. Embedding a culture of Equality and Respect**

|  |  |
| --- | --- |
| **Service user, carer and/or staff access needs**  (including disability) | Effective communication is essential during RT, especially where there are specific language and sensory communication requirements. The information provided should meet the individual’s communication needs e.g. people with physical, sensory or learning disabilities or people with autistic spectrum disorders or people who do not read or speak English. Staff may need to access the interpreting service. |
| **Involvement** | Reasons for using RT must be explained to the service user at the earliest opportunity. Service users should be encouraged to discuss their experiences and given the opportunity to write an account of this. This narrative should be included in the EPR, thereby supporting the underlying principles of recovery. |
| **Relationships & Sexual Orientation** | All service users must be given the same consideration and appropriate advice/treatment by staff in terms of RT, which must be independent of their circumstances. |
| **Culture & Ethnicity** | All service users must be given the same consideration and appropriate advice/treatment by staff in terms of RT, which must be independent of their circumstances. |
| **Spirituality** | All service users must be given the same consideration and appropriate advice/treatment by staff in terms of RT, which must be independent of their circumstances. |
| **Age** | Please refer to section 11. Cautions in the use of RT and circumstances for special care; Appendix 6 Algorithm for use of RT in Adults (18-65 years); Appendix 7 Algorithm for use of RT in Older Adults (65years+); Appendix 8 RT in Children and Adolescent in-patients (≥12 to ≤18 years). |
| **Gender & Gender Reassignment** | All service users must be given the same consideration and appropriate advice/treatment by staff in terms of RT, which must be independent of their circumstances. |
| **Advancing equality of opportunity** | All service users must be given the same consideration and appropriate advice/treatment by staff in terms of RT, which must be independent of their circumstances. |

**23. Promoting and Considering Individual Wellbeing**

Under the Care Act 2014, Section 1, the Trust has a duty to promote wellbeing when carrying out any of their care and support functions in respect of a person. Wellbeing is described as relating to the following areas in particular:

* Personal dignity (including treatment of the individual with respect);
* Physical and mental health and emotional wellbeing;
* Protection from abuse and neglect;
* Control by the individual over day to day life including over the care and support provided and the way in which it is provided;
* Participation in work, training, education, or recreation;
* Social and economic wellbeing;
* Domestic, family and personal;
* Suitability of living accommodation;
* The individual’s contribution to society.

There is no hierarchy and all should be considered of equal importance when considering an individual’s wellbeing. How an individual’s wellbeing is considered will depend on their individual circumstances including their needs, goals, wishes and personal choices and how these impact on their wellbeing.

In addition to the general principle of promoting wellbeing there are a number of other key principles and standards which the Trust must have regard to when carrying out activities or functions:

* The importance of beginning with the assumption that the individual is best placed to judge their wellbeing;
* The individual’s views, wishes, feelings and beliefs;
* The importance of preventing or delaying the development of needs for care and support and the importance of reducing needs that already exist;
* The need to ensure that decisions are made having regard to all the individual’s circumstances;
* The importance of the individual participating as fully as possible;
* The importance of achieving a balance between the individuals wellbeing and that of any carers or relatives who are involved with the individual;
* The need to protect people from abuse or neglect;
* The need to ensure that any restriction on the individuals rights or freedom of action that is involved in the exercise of the function is kept to the minimum necessary

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| **Part 3 – Document Control & Standards Information** |

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|  | Every procedural document will require a document control information section which will contain the following:  **24. Version Control**  Version control for the Procedural Document Management System   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Version** | **Date of Issue** | **Author** | **Status** | **Comment** | | **V5** | **4th Nov 2013** | **Head of Medicines Management** | **Superseded** |  | | **V5.1** | **2nd Feb 2015** | **Head of Medicines Management** | **Superseded** |  | | **V6** | **1st Dec 2016** | **Speciality Doctor (PICU) & Pharmacist** | **Superseded** |  | | **V6.1** | **1st Dec 2016** | **Speciality Doctor (PICU) & Pharmacist** | **Superseded** | **Interim update:**  **Appendix 5 – Algorithm for use of RT in adults; IM haloperidol dose changed to 3-5mg (was 2-5mg)**  **Appendix 6 – Algorithm for use of RT in older adults; IM haloperidol maximum dose in 24 hours reduced to 5mg (was 9mg/24 hours)** | | **V7** | **September 2020** | **Consultant (PICU) & Principal Clinical Pharmacist** | **Superseded** | **Full review:**  **Format change**  **Update of relevant resources**  **Inclusion of NEWS2 and Soft Measure chart**  **Inclusion of RT in CAMHS in-patients (≥12 to ≤18 years)**  **Inclusion from CPAC – Prevention and Management of acute disturbance in the context of COVID-19.**  **Update based on HPFT IM clozapine guidelines**  **Update in conjunction with HPFT Learning & Development Training.** | | **V7.1** | **July 2021** | **Medication Safety Officer** | **Current** | **Interim update:**  **Change of IM clozapine recommendation**  **Insertion of flumazenil quick reference guide as appendix** |   **25. Relevant Standards**   * **CQC Regulation 12: Safe care and treatment** * where equipment or medicines are supplied by the service provider, ensuring that there are sufficient quantities of these to ensure the safety of service users and to meet their needs * the proper and safe management of medicines * **Equality and RESPECT:** The Trust operates a policy of fairness and RESPECT in relation to the treatment and care of service users and carers; and support for staff.   **26. Associated Documents**  This Policy should be used in conjunction with the following HPFT policies all of which can be accessed via The Hive:   * Clinical Risk Assessment & Management for Individual Service Users Policy * Accessible Information and Interpreting Policy * Consensus Statement on High-Dose Antipsychotic Medication Royal College of Psychiatrists Report May 2006 * Consent to Examination, Care & Treatment including Electro-convulsive Therapy Policy * Guidelines for the use of intramuscular (IM) clozapine treatment for inpatients * Guidelines for the Care and Management of Pregnant Service Users * Injections Procedure (Procedure for administering injections) * MCA Advance Decisions to Refuse Treatment & Advance Statements Policy * HPFT Medicines Policy (including Unlicensed/Off-label Medicines) * Mental Capacity Act 2005 * Mental Health Act Code of Practice 2015 * Sharps Safety Policy * Violence & Aggression Policy * HPFT Physical Health Policy * POMH-UK Prescribing High-Dose and Combination Antipsychotics 2012 * POMH-UK Rapid Tranquillisation * Pressure Ulcer Policy * Seclusion & long term segregation Policy * Equality, Inclusion and Human Rights Policy     **27. Supporting References**  The following references and guidance are applicable to this policy:   1. NICE 2015. Guideline (NG10) Violence and aggression: short-term management in mental health, health and community settings. 2015 2. NICE 2014. Clinical Guideline No. 178. Psychosis and schizophrenia in adults: treatment and management. 2014 3. NICE 2018. Dementia A NICE-SCIE Guideline on supporting people with dementia and their carers in health and social care. NICE Clinical Guidelines (NG 97) 4. Royal College of Psychiatrists 2014. Council Report CR190. Consensus statement on high-dose antipsychotic medication. 5. Patel, MX and Sethi FN, et al (2018) Joint BAP NAPICU evidence-based consensus guidelines for the clinical management of acute disturbance: De-escalation and rapid transquillisation. *J Psychopharmacology* 32: 597-636 6. NICE 2015. Guideline NG 11. Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges. 2015 7. NICE 2014. Clinical Guideline 192. Antenatal and Postnatal Mental Health: Clinical Management and Service Guidance. 2014 8. Mercury Pharma International Ltd. Haloperidol Injection BP 5mg/ml®. Summary of Product Characteristics. Last Updated on emc 01-Sept-2017. Available at <https://www.medicines.org.uk/emc/product/514> 9. Janssen-Cilag Ltd. Haldol 2mg/ml oral solution®. Summary of Product Characteristics. Last updated on emc 01-Dec-2018. Available at <https://www.medicines.org.uk/emc/product/180/smpc> 10. Taylor D, Paton C, Kerwin R. The South London and Maudsley & Oxleas NHS Foundation Trusts Prescribing Guidelines in Psychiatry, 13th edition. Wiley-Blackwell. 2018 11. Hassaballa H.A, Balk R.A. Torsade de pointes associated with the administration of intravenous haloperidol. *American Journal of Therapeutics,* Jan 2003; **10** (1): 58-60 12. Hassaballa H.A, Balk R.A. Torsade de pointes associated with the administration of intravenous haloperidol: a review of the literature and practical guidelines for use. *Expert Opinion on Drug Safety.* Nov 2003, **2** (6): 543-547 13. Ballard CG, Birks J, Waite J Atypical antipsychotics for aggression and psychosis in Alzheimer Disease, *Cochrane Database of Systematic Reviews* 2006: Issue 1. Art. No.: CD003476. DOI: 10.1002/14651858.CD003476.pub2 14. BAP consensus guidance on the use of psychotropic medication preconception, in pregnancy and postpartum 2017. 15. NICE Clinical Guideline 185. Bipolar disorder: the assessment and management of bipolar disorder in adults, children and young people in primary and secondary care. 2014. 16. Lundbeck Ltd. Clopixol Acuphase Injection® (Zuclopenthixol acetate) Summary of Product Characteristics. Last updated on emc May 2020. Available at <http://www.medicines.org.uk/emc/993/smpc>   **Acknowledgements**   * Norfolk and Suffolk NHS Foundation Trust Rapid Tranquillisation Policy 2015 * Central and North West London NHS Foundation Trust Guideline: Rapid Tranquillisation June 2018 * Sussex Partnership NHS Foundation Trust: The Rapid Tranquillisation Policy Nov 2018 * Camden and Islington NHS Foundation Trust: Rapid Tranquillisation Guidance Jan 2019 * Birmingham and Solihull Mental Health NHS Foundation Trust: Rapid Tranquillisation Policy July, 2019   **27. Consultation**  The following people/groups were involved in the consultation:   * Drugs and Therapeutic Committee * Chief Pharmacist * Deputy Chief Pharmacist * Consultant Psychiatrists * PICU Consultant Psychiatrist * Clinical Pharmacists * Heads of Nursing * Resuscitation Officer * Professional Lead – Prevention & Management of Violence & Aggression * Directorate Manager Mental Health Act * Carer’s group * Service user group * CAMHs Consultants |
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| **Part 4 Appendices** |

**Appendix 1: Nursing Observations Pre and Post Rapid Tranquillisation**

**Appendix 2: Agitation-Calmness Evaluation Scale (ACES)**

**Appendix 3: NEWS2 – Adult Observation Chart**

**Appendix 4: Soft Measures: Visual Assessment: ABCDE**

**Appendix 5: Pharmacokinetics of medicines used for rapid tranquillisation (in adults)**

**Appendix 6: Algorithm for use of Rapid Tranquillisation (RT) (IM only) in Adults**

**(18-65 years)**

**Appendix 7: Algorithm for use of Rapid Tranquillisation (RT) (IM only) in Older Adults (65+ years)**

**Appendix 8: Rapid Tranquillisation (RT) in Children and Adolescent In-patients (≥12 to ≤18 years)**

**Appendix 9: Guidelines for the use of Flumazenil**

**Appendix 10: Haloperidol Administration – Oral & Intramuscular Equivalent Doses**

**Appendix 11: Drugs known to prolong QT interval**

**Appendix 12: Drug Choice in Pregnancy**

**Appendix 13: Prevention and Management of Acute Disturbance in the context of COVID-19**

**Appendix 14: Rapid Tranquillisation (RT) Checklist for Staff**

**Appendix 15: Rapid Tranquillisation (RT) Monitoring Sheet**

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| **Appendix 1** |

**Nursing Observations Pre and Post Rapid Tranquillisation**

**1. Nursing Observations**

The purpose of an assessment: before, during and after the administration of IM medication for acute behavioural disturbance (ABD) is to help identify and report medical problems that affect a service user’s health. The use of RT during ABD will be based upon a correct and directive prescription of medication, using the last resort approach which is proportional, the least restrictive and in the person’s best interests.

This sets the clinical scenario for monitoring, review and escalation of concerns in a timely manner. The process of review will include a set of recorded baseline physiological observations.

Because of the nature of ABD, the level of presenting agitation can prevent on-going objective physiological observation (NEWS2/Soft Measures).

The attending doctor must state the physical monitoring required after RT.

During physical interventions (RESPECT) observe Agitation-Calmness Evaluation Scale (ACES), respiratory rate and colour, looking for signs of cyanosis or distress. (Refer to the Trust Violence and Aggression Policy).

After RT, the NEWS2/Soft Measures and ACES must be completed:

BP, pulse, respiration, temperature, oxygen saturation, hydration levels, where practical to do so and the ACES.

# 2. Implementing Nursing Observations

* Carry out continuous supportive observations until reviewed by the MDT and follow the physical monitoring schedule set out under section 16
* Maintain the dignity and privacy of the service user  
  Use opportunities to establish rapport and empathy with the service user  
  Monitor any signs / symptoms of physical health deterioration
  + Ensure fluid intake and output is maintained.
  + Ensure pressure areas are dry and clean and monitor risk in line with Trust Pressure Ulcer Policy
* Grade and record levels of consciousness. Use the ACES scale (Appendix 2)
* All monitoring activity must be recorded in the Electronic patient record (EPR) and RT Monitoring Sheet. RT Checklist must also be completed.
* If ACES score is 8/9 or there are any signs of physical deterioration proceed as per NEWS2/Soft measures escalation process, and inform the on-call doctor (see Appendices 3 & 4). Members of staff must know the procedure for accessing emergency assistance

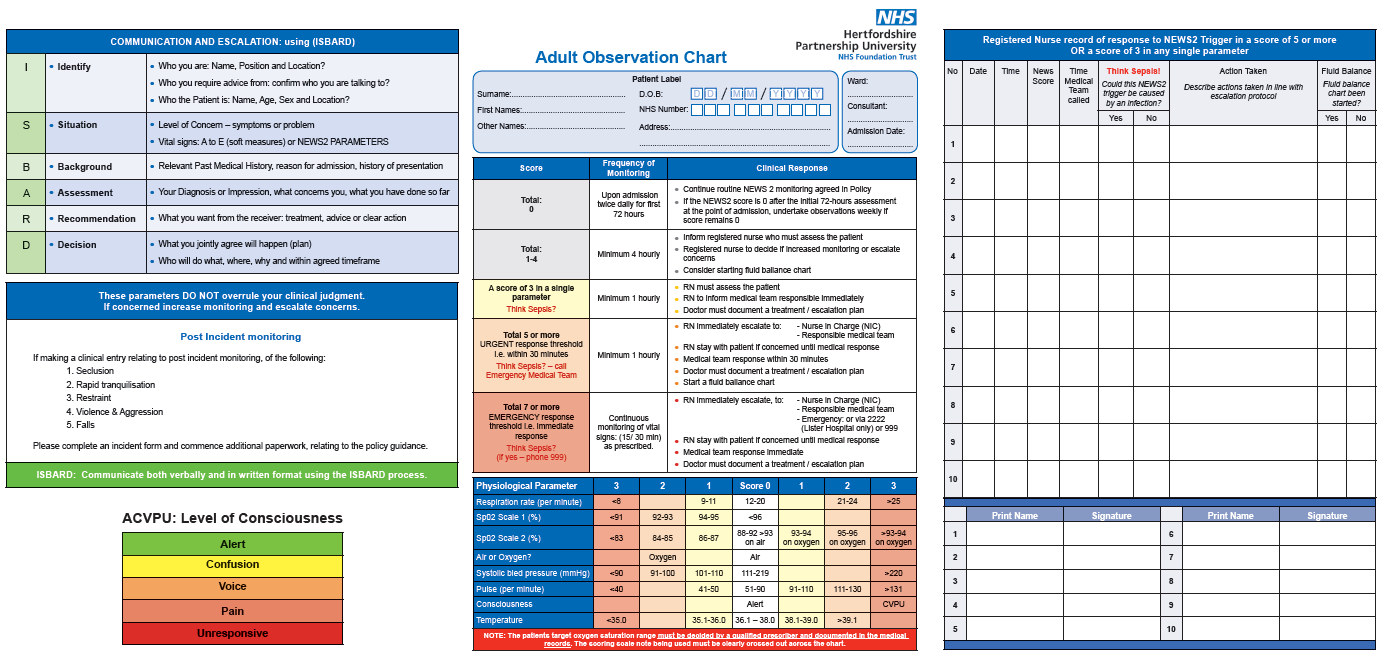
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| **Appendix 2** |

**Agitation-Calmness Evaluation Scale (ACES) are defined as follows:**

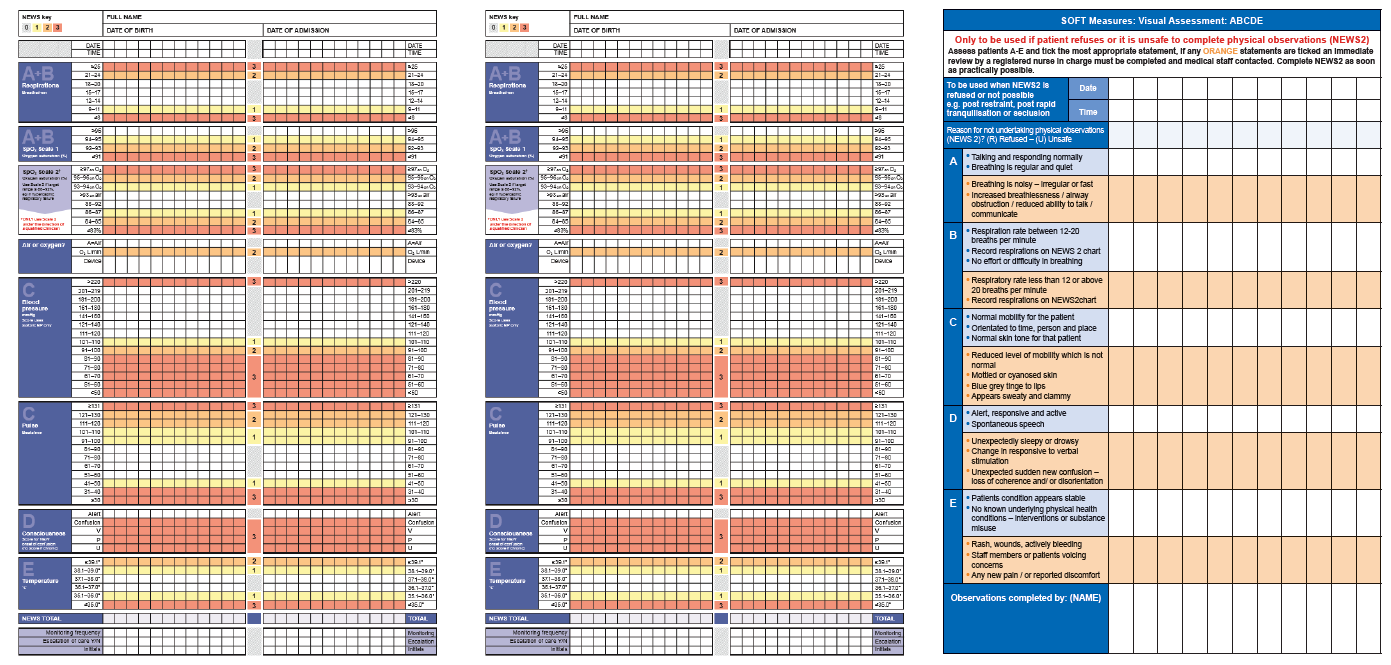
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| Objective observations may be difficult | 1 Marked Agitation: | High levels of physical activity, may demonstrate markedly increased levels of verbal expression, may be physically violent, cannot control signs of agitation if requested to do so, may require continuous nursing care/supervision and/or physical restraint. |
| 2 Moderate Agitation: | Moderately increased levels of physical activity, demonstrates increased levels of verbal expression and may be verbally threatening, is not physically violent, can partly control signs of agitation if requested to do so, requires standard nursing care/supervision. |
| 3 Mild Agitation: | Slightly increased levels of physical activity, may demonstrate slightly increased levels of verbal expression (e.g. may raise his or her voice volume), is not threatening or violent, can control signs of agitation if requested to do so, and requires standard nursing care/supervision. |
| AVPU\* | 4. Normal: | Normal levels of physical activity, normal levels of verbal expression, awake with eyes continuously open. |
| 5 Mild Calmness: | Slightly reduced levels of verbal and physical activity, eyes continuously open, remains aware of and responsive to his or her environment |
| 6 Moderate Calmness: | Moderately reduced levels of verbal and physical activity, eyes may be intermittently open, easily aroused or responsive to mild verbal (e.g. calling of name) or physical stimulation (e.g. a gently touch), remains awake when stimulus removed. |
| 7 Marked Calmness: | Greatly reduced verbal or physical activity, sleeping lightly, aroused by mild to moderate verbal (e.g. calling of name) or physical stimulation (e.g. a touch). |
| 8. Deep Sleep: | No verbal or physical activity, sleeping deeply, awakened only with great difficulty by vigorous verbal (e.g. loud repeated calling of name) and/or physical stimulation (e.g. vigorous, repeated shaking of service user's shoulder), returns to sleep immediately when stimulus is removed. |
| 9. Unrousable: | Sleeping deeply, cannot be roused by either vigorous verbal or physical stimulation (e.g. vigorous, repeated shaking of service user's shoulders). |

AVPU – Alert, Voice, Pain, Unresponsive

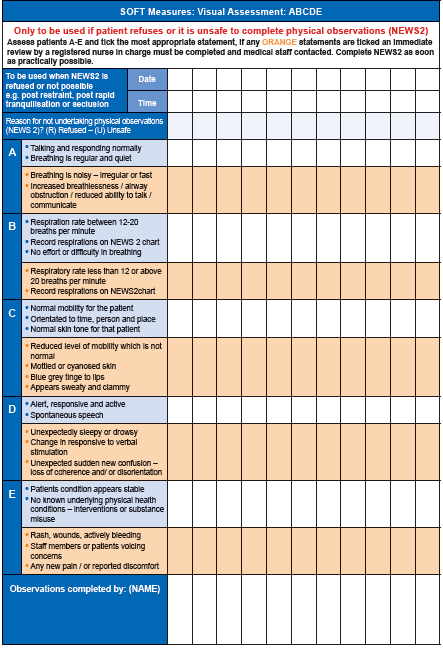
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| **Appendix 3** |



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| **Appendix 3** |



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| **Appendix 4** |



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| **Appendix 5** |

**Pharmacokinetics of Medicines Used for Rapid Tranquillisation (in adults)**

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| **Medicine** | **Route** | **Pharmacokinetics** | **Major Side Effects** | **Notes** |
| **Lorazepam** | Oral | Onset: 20-30 mins  Peak: 2 hours  Duration of effect (DE) 6-8hrs | * Loss of consciousness * Respiratory Depression * Disinhibition | * IM absorption is as slow as oral absorption, but is more rapid in an active patient. * The injection should be diluted 50:50 with water for injections prior to administration. * No accumulation with repeated doses or in impaired liver function. * Has wide therapeutic index. * Respiratory depression is readily reversed with the specific antagonist flumazenil (refer to appendix 6 for further information) * Disinhibition is more likely to occur in those with organic brain disease, including learning disabilities, <18 and >65 years, & perhaps those with impulse control problems. * Injection requires refrigeration (2-8⁰C) * **IM Benzodiazepine should not be given within 1 hour of IM Olanzapine** |
| IM | Onset: 15-30 mins  Peak: 60-90 mins  DE: 6-8 hrs |
| **Haloperidol** | Oral | Onset: 1-2 hrs  Peak: 2-6 hrs  DE: 18-24 hrs | * EPS * Hypotension * Increased QTc or arrhythmias * Seizures * Sudden death | * **A baseline ECG is essential** * An antimuscarinic agent such as procyclidine (oral and IM) should be prescribed and available (as there is a risk of acute dystonia) * The bioavailability of both formulations is different and this must be taken into account when considering the total dose per 24 hr period. * Not recommended for IV use because of the risk of arrhythmias. |
| IM | Onset: 15-30 mins  Peak: 20 mins  DE: 18-24 hrs |
| **Promethazine** | Oral | Onset: 20-60 mins  Peak: 2-3 hrs  DE: 4-6 hrs (12 hrs) | * Prolonged sedation * Seizures * Cardio-respiratory depression | * Slower onset of action than lorazepam or haloperidol * A suitable alternative for patients in whom respiratory function is compromised, or in those sensitive/tolerant to benzodiazepines * May be used in combination with Haloperidol to reduce EPS risk |
| IM | Onset of sedation: 20-60 mins  Peak: 2-3 hrs  DE: 4-6 hrs(12 hrs) |
| **Olanzapine** | Oral | Onset: ≈2 hrs Peak: 5-8 hrs  DE: 24 hrs | * Hypotension * Bradycardia * Syncope | * Not licensed for use in dementia-related psychosis/ behavioural disturbances. * Not licensed for use in children/ adolescents. * Less likely to cause EPS than haloperidol. * I.M. administration results in initial maximum plasma concentration 5 times higher than same dose given orally. * IM Olanzapine + IM Lorazepam should not be used within ONE hour of each other |
| IM | Onset: 15-30 mins  Peak: 15-45 mins  DE: 24 hrs |
| **Aripiprazole** | IM | Onset: 30-45 mins  Peak: 1-3 hrs  DE: 18-24 hrs | * Akathisia * Tachycardia * Orthostatic hypotension and increased diastolic blood pressure * Nausea | * Not sedating * May be given concurrently with parenteral benzodiazepines * Less likely to cause EPS than haloperidol * Not licensed for use in dementia-related psychosis/ behavioural disturbances * Not licensed for use in children/ adolescents. |

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| **Appendix 6** |

**ALGORITHM FOR USE OF RAPID TRANQUILLISATION (RT) (IM ONLY) IN ADULTS (18-65 YEARS)**

(This algorithm is for guidance only; please consult BNF/individual medicines SmPCs for full prescribing information)

**If RT is necessary following unsuccessful initial de-escalation approaches, including oral medication (service user refuses repetitively oral medication and is not settled):**

* Discontinue potentially unhelpful medicines; simplify regime, including any therapeutic duplication
* Review physical health and drug status. If **young, thin, frail** or **suffering cardiac/respiratory disease**; seek advice from senior colleagues as lower doses may be required
* Note total psychotropic medicines taken in the last 24 hours – include any PRN doses
* If total dose > BNF maximum daily limits, contact the Responsible Clinician/consultant/on-call consultant

**Important considerations:**

* For people with learning disabilities; start with low doses & increase dose slowly (especially sensitive to the side-effects of psychotropics)
* Service user's preferences or advance statements/decisions
* Pre-existing physical health problems/possible intoxication/pregnancy
* Previous response to RT, including adverse effects
* Potential for interactions with other medications
* Use IM lorazepam for antipsychotic naïve patients or if insufficient information
* Use IM promethazine if respiratory function is compromised or the patient is sensitive/tolerant to benzodiazepines
* A baseline ECG is recommended prior to treatment with haloperidol
* Ensure availability of: resus equipment, IV Flumazenil (for respiratory depression -RR <10) and IM anticholinergics (for acute dystonic reactions)

**Medicines must never be mixed in the same syringe, give separately**

**Max. daily doses specified below are for combined oral and parenteral doses**

* **IM lorazepam 1-2mg (max. 4mg/day) FIRST CHOICE (alternative: IM promethazine 25-50mg (max. 100mg/day) OR**
* **IM Haloperidol 3–5 mg (max. 12mg/day) plus IM promethazine 25-50mg (max. 100mg/day) OR**
* **IM olanzapine 5-10mg (max.20mg /day) OR**
* **IM aripiprazole 9.75mg (max 30mg /day)**

**If given IM lorazepam OR IM promethazine**

**Inform medical team/duty doctor and review**

**If given IM haloperidol plus IM promethazine OR**

**IM olanzapine OR IM aripiprazole**

**Inform medical team/duty doctor and review**

* **Consider a further dose after 60mins if partial response**
* **Consider IM haloperidol plus IM promethazine OR IM olanzapine OR IM aripiprazole if no response**
* **Consider a further dose after 60 mins if partial response. For aripiprazole wait at least 2 hours**
* **Consider IM lorazepam alone if this has not already been used during this episode, if no response. If IM lorazepam has already been used, arrange an urgent team meeting to carry out a review and seek a second** **opinion if needed.**

**Treatment failure with the above,**

**SEEK ADVICE FROM CONSULTANT PSYCHIATRIST**

Zuclopenthixol acetate (Acuphase) is **NOT** an appropriate medication for use in RT

**PHYSICAL MONITORING FOLLOWING RT**

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| **Alertness using ACES Scale** | | Monitor at least **every hour** until there are no further concerns about physical health status (service user is active and ACES 7 or below)  Monitor every **15 minutes** if BNF max. dose exceeded or service user :   * is asleep or sedated * has taken illicit drugs or alcohol * has a pre-existing physical health problem * has experienced any harm as a result of any restrictive intervention * concurrent prescribing of other medications * Mobility is affected   Monitor **continuously** if the patient was tasered and/or received CS gas by the police. |
| **NEWS 2**   * + **Respiratory rate**   + **Pulse**   + **Blood Pressure**   + **Oxygen Saturation SpO2**   + **Temperature**   + **Hydration** | **SOFT Measures** |
| **Monitor for risk of falls and deterioration in mobility**  **Ensure fluid intake is maintained. Fluid intake and output should be monitored.** | | |

**ALGORITHM FOR USE OF RAPID TRANQUILLISATION (RT) (IM ONLY) IN OLDER ADULTS (65+ YEARS)**

(This algorithm is for guidance only; please consult BNF/individual medicines SmPCs for full prescribing information)

**If RT is necessary following unsuccessful initial de-escalation approaches, including oral medication:**

* Discontinue potentially unhelpful medicines; simplify regime, including any therapeutic duplication
* Review physical health and drug status. If **thin, frail** or **suffering cardiac/respiratory disease** seek advice from senior colleagues as lower doses may be required
* Note total psychotropic medicines taken in the last 24 hours – include any PRN doses
* If total dose > BNF maximum daily limits, contact the Responsible Clinician/consultant/on-call consultant

**Important considerations:**

* Potential for interactions with other medications
* Pre-existing physical health problems/possible intoxication
* Previous response to RT, including adverse effects
* DO NOT prescribe antipsychotics to patients with Dementia with Lewy Body or Parkinson’s Disease
* DO NOT use lorazepam for the management of delirium (use small doses of haloperidol)
* A baseline ECG is recommended prior to treatment with haloperidol
* If haloperidol is prescribed, co-prescribe prn IM procyclidine to reduce risk/treat dystonia or other extrapyramidal side-effects
* Use IM lorazepam for antipsychotic naïve patients, in those with narrow angle glaucoma, CVD, TIA, CVA, stroke, dementia, or if insufficient information
* Use IM promethazine if respiratory function is compromised or if the patient is sensitive/tolerant to benzodiazepines
* Service user's preferences or advance statements/decisions
* For people with learning disabilities; start with low doses & increase dose slowly (especially sensitive to the side-effects of psychotropic)
* Ensure availability of: resus equipment, IV Flumazenil (for respiratory depression -RR <10) and IM anticholinergics (for acute dystonic reactions)

**Medicines must never be mixed in the same syringe, give separately**

**Max. daily doses specified below are for combined oral and parenteral doses**

**For patients WITH narrow angle glaucoma, CVD, TIA, CVA, stroke or dementia**

**For patients WITHOUT narrow angle glaucoma, CVD, TIA, CVA, stroke or dementia**

* **FIRST CHOICE: IM lorazepam 0.5 – 1mg (max. 2mg/24hrs) (alternative : IM promethazine 25mg (max. 50mg/24hrs)**
* **For IM lorazepam if > 2mg/day required only upon senior doctor approval**
* **OR IM haloperidol 1 – 2.5mg (max. 5mg/24hrs) +/- IM promethazine 25mg (max. 50mg/24hrs)**
* **If partial response, consider a further dose(s) after 60mins and monitor patient**
* **IM Aripiprazole 5.25mg**
* **IM Olanzapine 5-7.5mg**
* **IM lorazepam 0.5 – 1mg (max. 2mg/24hrs) (alternative : IM promethazine 25mg (max. 50mg/day)**
* **If partial response, consider a further dose after 60mins and monitor patient**
* **If no response, consider IM haloperidol 1 - 2.5mg (max. 5mg / 24hrs)**

**Treatment failure with the above**

**SEEK ADVICE FROM CONSULTANT PSYCHIATRIST**

**PHYSICAL MONITORING FOLLOWING RT**

|  |  |  |
| --- | --- | --- |
| **Alertness using ACES Scale** | | Monitor at least **every hour** until there are no further concerns about physical health status (service user is active and ACES 7 or below)  Monitor every **15 minutes** if BNF max. dose exceeded or service user :   * is asleep or sedated * has taken illicit drugs or alcohol * has a pre-existing physical health problem * has experienced any harm as a result of any restrictive intervention * concurrent prescribing of other medications * Mobility is affected   Monitor **continuously** if the patient was tasered and/or received CS gas by the police. |
| **NEWS 2**   * + **Respiratory rate**   + **Pulse**   + **Blood Pressure**   + **Oxygen Saturation SpO2**   + **Temperature**   + **Hydration** | **SOFT Measures** |
| **Monitor for risk of falls and deterioration in mobility**  **Ensure fluid intake is maintained. Fluid intake and output should be monitored.** | | |

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| **Appendix 7** |

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| **Appendix 8** |

**RAPID TRANQUILISATION (RT) IN CHILDREN AND ADOLESCENT INPATIENTS**

**(≥12 to ≤18 YEARS)**

N.B.: This section aims to provide guidance on the choice of medication and doses, and the monitoring required for RT in children and adolescents aged 12 to 18 years. **This section must be read in conjunction with the rest of the document**

The evidence of medicines used for RT in children and adolescents is limited and therefore also extrapolated from the adult population. There may however be pharmacokinetic variances between adults and children / adolescents thus medicines prescribed for them need to be carefully tailored. In addition, many psychotropic drugs are not licensed for use in young people.

Acute assessment and management of aggressive children / adolescents can therefore pose significant challenges for clinicians. Use of RT in under-18s **must** be discussed with their Consultant / CAMHS On-call Consultant prior to treatment. When using medicines for RT in children and adolescents all the same considerations for adults apply in addition to the following:

See also table A and algorithm below: Guidelines on Medication used for de-escalation and RT in children and adolescents 12 to 18 years

* Children / adolescents should only be treated with the following medicines after completing a comprehensive risk assessment and when it has been established that the risk of not doing so is greater than the risk of acute pharmacological treatment.
* When considering RT for a child or young person it is important to exclude organic disease. The assessment should also include consideration of severe impulsivity problems, conduct disorder, oppositional defiant disorder, pervasive developmental disorders and learning disabilities as these may all contribute to poor frustration tolerance and therefore aggressive presentation. Many children who have been severely abused or traumatised may also present with disorganised or violent behaviour.
* Consent issues:
* At the point of admission, theappropriate orrelevant local consent form should be completed by the young person and / or parents/carers
* In children / adolescents who are not Gillick competent, the parent (s)/carer(s) should be informed and consent sought for such treatment. It is good practice to inform the child and the parent/carer(s).
* In all cases the child and adolescent must be informed that the medication is going to be given and must be given the opportunity at any stage to accept oral medication voluntarily.
* Rapid tranquilisation should only be considered once de-escalation strategies (including talking to the child / adolescent calmly or clearly, moving to a low stimulus environment, listening to their complaints, using distraction, oral medication) have failed.
* Lower doses should be considered in young people as they are more sensitive to the side effects of de-escalation / rapid tranquilisation medications. Those with autism or a learning disability in childhood are even more so. A ‘start low, go slow’ approach should be adopted.
  + There is a higher risk of disinhibition or paradoxical reactions with benzodiazepines in children compared with adults.
  + This age group is likely to be antipsychotic naïve and more sensitive to EPS, therefore, every effort should be made to avoid the use of typical antipsychotics
  + In addition to other factors including age, the weight of the young person should also be taken into account when deciding on medication regimen.
* In all cases the minimum effective dose of medication should be used. The recommended maximum doses in table A should only be exceeded in extreme circumstances and under the advice and direction of the Consultant Child & Adolescent Psychiatrist (Please refer to the Trust High Dose Monitoring policy for further guidance).
* In older adolescents (>16 years), the use of adult doses (see BNF / SPC for individual medications) may be considered, especially in those who are not drug naïve, have no other physical health concerns and where doses in the lower end of the quoted dose range have been ineffective. Use of adult doses in these individuals should be approved by the Consultant Child & Adolescent Psychiatrist.
* Polypharmacy within a class of medication e.g. antipsychotics should, where at all possible, be avoided.
* The use of many of these medicines for de-escalation of acutely disturbed behaviour and RT in under 18 years is outside of their UK license (see table A / BNF for Children for licensing information), i.e. is “off-label” and therefore the prescriber’s responsibility and potential liability are increased. The child / adolescent and their parent/carers should be informed of the off-label use of medicines, and this should be documented in the service users’ notes. Refer to the Trusts Medicines Policy for further guidance on the use of ‘off-label’ medicines
* Monitor physical health (see below and section 16 of main document) and emotional impact continuously when undertaking RT in a child or young person.
* Service user de-brief (in addition to section 17 of main document): After the treatment of an acute disturbance in a child/adolescent the staff should also discuss the management and treatment given with the parents / carers. This discussion should be documented in the child / adolescents notes.

**Zuclopenthixol acetate (Clopixol AcuphaseTM)** – (see also section 12 of main document)

* **Zuclopenthixol acetate is NOT recommended for use in RT,** due to its delayed onset of action and long duration of action
* Note, there is a lack of clinical experience with its use in children / adolescents and it is not licensed for use in this group. Zuclopenthixol acetate may cause severe extrapyramidal side effects even at low doses in this age group.
* If deemed clinically appropriate by the responsible clinician, it may be used with extreme caution as a medium term management plan in the following circumstances:
* Where service users with a psychotic or manic illness have failed to respond adequately to repeated RT and it is anticipated they will require further RT doses
* In the ongoing risk management of violence once tranquillisation has been satisfactorily achieved, in order to minimise risk to the service user / others from frequent use of RT and physical restraints. N.B. It is important to consider the pharmacokinetics of other drugs when prescribing zuclopenthixol acetate.
* Due to the lack of clinical experience and risk of EPSE, 25mg is an appropriate starting dose in children / adolescents. Subsequent doses (if required) should be based on response and tolerability.
* It should never be used in children / adolescents who are antipsychotic naive, sensitive to EPSE, those with cardiac disease, hepatic or renal impairment and in pregnancy. It should not be used in those who are struggling excessively in order to prevent accidental injection into a vein.
* Physical Health Monitoring (see below and section 16 of main document) is necessary after administration of zuclopenthixol acetate and this should be decided based on the individual service user circumstances.

**Table A: Medication used for de-escalation and RT in children and adolescents 12 to 18 years**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Drug** | **Route** | **Dose** | **Pharmacokinetics** | **Major side effects / risks** | **Comments** |
| Lorazepam | PO | >12 years: 500 micrograms to 2mg  (Max: 4mg/24 hours) | Onset: 20 – 30 mins  Peak: 2 hours | * Loss of consciousness * Respiratory depression / arrest * Disinhibition | * **Preferred first line option (NICE)** especially in antipsychotic naïve * Avoid in those tolerant to benzodiazepines / recently abused benzodiazepines or other respiratory depressants e.g. alcohol * Disinhibition and paradoxical reactions are more likely to occur in those with organic brain disease, learning disabilities, <18 years and impulse control problems * Lorazepam IM should be mixed in a 1:1 ratio with water for injections prior to administration. * **IM benzodiazepines should not be given within 1 hour of IM olanzapine** * Has a wide therapeutic index * Respiratory depression is readily reversed with specific antagonist flumazenil (refer to appendix 9 for further information) |
| IM | >12 years: 500 micrograms to 2mg  (Max: 4mg/24 hours) | Onset: 15 – 30 mins  Peak: 60 – 90 mins |
| Promethazine | PO | >12 years: 25 - 50mg  (Max: 100mg/24 hours) | Onset: 20 – 60 mins  Peak: 2 - 3 hours | * Prolonged sedation * Seizures * Cardio-respiratory depression | * Limited evidence for efficacy * Slower onset of action than Lorazepam * Promethazine is not licensed for use in RT, however, it is licensed for sedation at these doses. * May be considered as an alternative in those who are antipsychotic naïve or those tolerant to benzodiazepines * May be used in combination with haloperidol to reduce EPS risk (based on adult data) |
| IM | >12 years: 12.5 - 50mg  (Max: 100mg/24 hours) | Onset of sedation: 20 – 60 mins  Peak: 2 - 3 hours |
| Risperidone | PO | 500 micrograms – 2mg  (Recommended max: 6mg / 24 hours ) | Onset: 1 hour  Peak: 1 – 2 hours | * EPSE * Hypotension | * In children with moderate, severe or profound learning disability and/or epilepsy, consider a dose range of 250 micrograms - 1mg of risperidone * Risperidone is not licensed for de-escalation in children / adolescents. It is licensed for aggression in conduct disorder at a maximum dose of 1.5mg /24 hours. * Risperidone is however used unlicensed for mania and psychosis in children at the doses recommended for de-escalation (see BNF for Children) |
| **\***Haloperidol | PO | >12 years: 500micrograms - 5mg  (max: 10mg/24 hours) | Onset: 1 – 2 hours  Peak: 2 – 6 hours | * EPSE * Hypotension * Increased QTc or arrhythmias * Seizures * Sudden death | * **A baseline ECG is essential** * Haloperidol should only be considered if other suitable medications for de-escalation / RT have proved ineffective or if there is documented evidence of previous effectiveness and tolerability. * Oral haloperidol is licensed in children / adolescents for other indications at a maximum dose of 5mg / 24 hours * IM Haloperidol is not licensed for use in children / adolescents. * Caution if using Haloperidol in an unknown or antipsychotic naïve child / adolescent as EPS may be more common and severe than in adults * To be used in combination with Promethazine to reduce EPS risk (based on adult data) * An antimuscarinic agent such as \***procyclidine (oral and IM) should be prescribed and available in case of EPS** * The bioavailability of both IM and oral Haloperidol is different and must be taken into account when considering the total dose per 24 hours (see appendix 10 for further information) * Not recommended for IV use due to risk of arrhythmias |
| IM | >12 years: 1 - 5mg  (max: 6mg/24 hours | Onset: 15 – 30 mins  Peak: 20 – 40 mins |
| Olanzapine | PO | > 12 years: 2.5 – 10mg  (Max: 20mg / 24 hours) | Onset: ≈ 2 hours  Peak: 5 – 8 hours | * Hypotension * Bradycardia * Syncope | * Olanzapine oral and IM is not licensed for use in children / adolescents * Less likely to cause EPS than haloperidol * IM administration can result in initial maximum plasma concentrations 5 times higher than same oral dose * **IM benzodiazepines should not be given within 1 hour of IM olanzapine** |
| IM | > 12 years: 2.5 – 10mg  (Max: 20mg / 24 hours and no more than 3 injections / 24 hours) | Onset: 15 – 30 mins  Peak: 15 – 45 mins |

**\*Procyclidine (oral / IM) should be prescribed for treatment of EPS**

**Dose >12 years: Oral: 2.5 – 5mg; IM: 5 – 10mg (unlicensed for use in children)**

**Maximum doses specified in the table above are for combined oral and parenteral doses**

**There are specific risks associated with the different classes of medications used in RT. When combinations are used, risks may be compounded. See section 13 of the main document for an overview of the risks, the associated signs /symptoms and its management.**

**ALGORITHM FOR USE OF RAPID TRANQUILLISATION (RT) IN CHILDREN AND ADOLESCENTS (12-18 YEARS)**

This algorithm is for guidance only; please consult individual medicines SPCs for full prescribing information

**Aim:**

* To quickly calm the service user To reduce the risk of harm to the service user and others

**If RT is necessary following unsuccessful initial de-escalation approaches, including oral medication:**

* Discontinue potentially unhelpful medicines; simplify regime, including any therapeutic duplication
* Review physical health and drug status. If **young, thin, frail** or **suffering cardiac/respiratory disease**; seek advice from senior colleagues as lower doses may be required
* Note total psychotropic medicines taken in the last 24 hours – include any PRN doses
* If total dose > BNF maximum daily limits, contact the Responsible Clinician/consultant/on-call consultant

**Important considerations prior to administering RT:**

* Attempts at de-escalation (including oral medication) should be exhausted. Oral medication must be offered prior to RT
* Service user's preferences or advance statements/decisions
* Review psychotropic medication administered in the last 24 hours (including prn). If greater than BNF or recommended limits contact senior doctor / consultant psychiatrist.
* RT should be tailored to the individual service user taking into account any risk factors (e.g. physical illness, weight, interacting medication, learning disabilities / autism) as lower doses may be required
* Ensure availability of: resuscitation equipment, flumazenil (IV) – for respiratory depression & procyclidine (IM) – for acute EPS

**Non-psychotic; Unknown Illness or Antipsychotic naïve**

**Psychotic illness / Confirmed history of antipsychotic use (NO ECG AVAILABLE)**

**Psychotic illness / Confirmed history of antipsychotic use (ECG AVAILABLE)**

**DE-ESCALATION: ORAL MEDICATION**

**If RT is necessary following unsuccessful initial de-escalation approaches, including oral medication:**

* Discontinue potentially unhelpful medicines; simplify regime, including any therapeutic duplication
* Review physical health and drug status. If **young, thin, frail** or **suffering cardiac/respiratory disease**; seek advice from senior colleagues as lower doses may be required
* Note total psychotropic medicines taken in the last 24 hours – include any PRN doses
* If total dose > BNF maximum daily limits, contact the Responsible Clinician/consultant/on-call consultant

**Lorazepam (first choice)**

0.5mg – 2mg (max. 4mg/24hrs)

**OR**

**Promethazine**

25 – 50mg (max. 100mg/24hrs)

**Lorazepam OR Promethazine** PLUS **Risperidone** (if needed)

**OR**

**\*Olanzapine only**

**OR**

**\*\*Haloperidol WITH Promethazine**

500mcg -5mg (max. 10mg/24hrs)

**Lorazepam OR Promethazine** PLUS

**Risperidone** (if needed)

500mcg – 2mg (max. 6mg/24hrs)

250mcg – 1mg in LD/epilepsy

**OR**

**\*Olanzapine only**

2.5 -10mg (max 20mg/24hours)

**If 1st dose is inadequate consider repeating oral dose after 45-60 min; consider IM if oral medication repeatedly refused / risk assessed as high.**

**RAPID TRANQUILLISATION: IM MEDICATION**

**Medicines MUST NOT be mixed in the same syringe; Maximum daily doses specified are for combined oral and IM doses**

**If RT is necessary following unsuccessful initial de-escalation approaches, including oral medication:**

* Discontinue potentially unhelpful medicines; simplify regime, including any therapeutic duplication
* Review physical health and drug status. If **young, thin, frail** or **suffering cardiac/respiratory disease**; seek advice from senior colleagues as lower doses may be required
* Note total psychotropic medicines taken in the last 24 hours – include any PRN doses
* If total dose > BNF maximum daily limits, contact the Responsible Clinician/consultant/on-call consultant

**Lorazepam (first choice)**

0.5mg – 2mg (max. 4mg/24hrs)

**OR**

**Promethazine**

12.5 – 50mg (max. 100mg/24hrs)

**Lorazepam OR Promethazine**

**OR**

**\*Olanzapine only**

**OR**

**\*\*Haloperidol WITH Promethazine**

1mg -5mg (max. 6mg/24hrs)

**Lorazepam OR Promethazine**

**OR**

**\*Olanzapine only**

2.5 – 10mg (max. 20mg/24hrs or ≤ 3 injections/24hrs)

**N.B: IM Olanzapine NOT to be given with 1 hour of IM benzodiazepines**

* Inform medical team if IM given and review
* Consider a further dose after 60 mins if partial response
* If no response to IM Lorazepam consider IM Promethazine
* Inform medical team and review if IM given
* Consider a further dose after 60 mins if partial response
* If no response, consider IM lorazepam alone if this has not already been used during this episode. If IM lorazepam has already been used, arrange an urgent team meeting to carry out a review and seek a second opinion if needed.

**Treatment failure with the above,**

**SEEK ADVICE FROM**

**CONSULTANT PSYCHIATRIST/ SENIOR DOCTOR**

**COMPLETE PHYSICAL HEALTH MONITORING FOLLOWING RT AS PER POLICY**

\* No additional sedation (e.g. Promethazine) should be required with Olanzapine

\*\*Ensure Procyclidine (PO and IM) is prescribed and available when using Haloperidol due to risk of EPS.

N.B: Zuclopenthixol acetate (Acuphase) is **not** an appropriate medication for use in RT

**PHYSICAL MONITORING** (see also section 16 and appendix 1 of document)

* Physical monitoring post RT should be carried out following the schedule below and recorded on the NEWS2 / EWS chart.

|  |  |  |
| --- | --- | --- |
| **Physical Parameters** (NEWS2 / EWS) | | **Monitoring Interval** |
| **Alertness using ACES (**appendix 2) | | Monitor every 15 minutes for first hour, then hourly until there are no further concerns about physical health status (service user is active and ACES score ≤ 7)  More frequent monitoring (clinical judgement by team) if BNF / recommended maximum dose exceeded or service user:   * is asleep or sedated * has taken illicit drugs or alcohol * has a pre-existing physical health problem * has experienced any harm as a result of any restrictive intervention * concurrent prescribing of other medications * mobility is affected   Monitor **continuously** if the service user was tasered and/or received CS gas by the police. |
| **NEWS 2 / EWS**   * + **Respiratory rate**   + **Pulse**   + **Blood Pressure**   + **Oxygen Saturation**   **(SpO2)**   * + **Temperature**   + **Hydration** | **SOFT Measures + resp. rate**  (as minimum if unable to complete physical observations) |
| **Monitor for risk of falls and deterioration in mobility.**  **Ensure fluid intake is maintained. Fluid intake and output should be monitored.** | | |

* The scores for individual observations should be recorded, with a total at the end of each column on the EWS / NEWS2 chart to identify and complete actions required.
* Where it is unsafe / difficult to undertake this monitoring due to service user unwillingness, a more subjective assessment is required using the SOFT Measures: Visual Assessment tool (Refer to Appendix 4).
* Baseline monitoring values (including ECG and haematological monitoring) should be undertaken within 24 hours of admission to ensure any changes post-RT are noted immediately.
* If ACES score is 8/9 or there are any signs of physical deterioration proceed as per EWS / NEWS2 or Soft measures escalation process and inform the duty / on-call doctor (see Appendices 3 & 4). Members of staff must know the procedure for accessing emergency assistance.
* The service user’s willingness to comply/allow monitoring physical parameters must be kept in mind when prescribing and administering RT medicines.

**Age and other considerations**

* NEWS2 should not be used in children (aged <16 years) or in women who are pregnant, as baseline physiological parameters differ in these groups. Physiological response to acute illness can also be modified in children and pregnancy.
* NEWS2 may also be unreliable in patients with spinal cord injury owing to functional disturbances of the autonomic nervous system – use with caution.
* Within CAMHS, all service users should be clinically assessed on admission by medical staff and a decision made regarding which chart should be used – either EWS (12- 15 years) or NEWS2 (16+) depending on physicality and BMI.
* Consideration should be given to age, size and physical presentation with a baseline taken on admission to ensure any changes are noted immediately

**Supporting References**

* Taylor D, Paton C, Kerwin R. The South London and Maudsley & Oxleas NHS Foundation Trusts Prescribing Guidelines in Psychiatry, 13th edition. Wiley-Blackwell. 2018
* Joint Formulary Committee (2020) British National Formulary for Children. Available at: [http://www.medicinescomplete.com](http://www.medicinescomplete.com/) (Accessed: March 2020)

**Acknowledgements**

* Birmingham and Solihull Mental Health NHS Foundation Trust: Rapid Tranquillisation Policy, July 2019
* Central and North West London NHS Foundation Trust: Rapid Tranquillisation Guideline, June 2018
* East London NHS Foundation Trust: Guideline for the management of acutely disturbed children & adolescents (6-17 years), November 2017
* Teek, Esk and Wear Valleys NHS Foundation Trust: Rapid Tranquillisation Policy, August 2019

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| **Appendix 9** |

**Quick reference guide: Flumazenil for the emergency reversal of central effects of benzodiazepines**

* Flumazenil is used in an emergency to reverse the central depressant effects of a benzodiazepine overdose. Flumazenil must be given via the IV route. Within HPFT, it can only be administered by doctors who feel clinically confident to do so.
* Use alongside standard procedures for management of respiratory depression outlined within the resuscitation policy.
* Always seek urgent medical assistance (call 999). Even where effective, the effects of flumazenil are of very short duration.
* This is a quick reference guide to INTRAVENOUS flumazenil administration for emergency reversal of central depressant effects of benzodiazepines.

|  |  |
| --- | --- |
| **INDICATION** | * Unlicensed use in an emergency to reverse the central depressant effects of a benzodiazepine overdose. * Consider use if the respiratory rate falls below 10 respirations per minute after the administration of benzodiazepines. |
| **CONTRAINDICATIONS** | * Life threatening condition which is controlled by benzodiazepines e.g. raised intracranial pressure, status epilepticus. * Suspected mixed overdose especially those including tricyclic antidepressants or other pro-convulsant drugs. * Head injury, unstable intracranial pressure (ICP). |
| **CAUTIONS** | * Hepatic impairment – careful dose titration needed. * Avoid rapid injection. * Benzodiazepine dependence (may precipitate withdrawal symptoms); elderly; history of panic disorders (risk of recurrence); prolonged benzodiazepine therapy for epilepsy (risk of convulsions). * Flumazenil should only be administered by, or under the direct supervision of personnel experienced in its use. |
| **DOSE AND ROUTE OF ADMINISTRATION** | * Recommended dose is based on the licensed indication for “reversal of sedative effects of benzodiazepines in anaesthesia and clinical procedures” * In adults, and children over 20kg, by **intravenous** injection (undiluted): * **Initial dose**: 200 micrograms **intravenously** over 15 seconds * **Repeat doses** (if required level of consciousness not achieved after 60 seconds): 100 micrograms **intravenously** over 10 seconds. Repeat if necessary at 60 second intervals. * **Maximum** 1mg in 24 hours (i.e. one initial dose and eight subsequent doses). * Flumazenil has a duration of action which is shorter than benzodiazepine drugs commonly encountered in overdose. Repeat doses may be required to maintain clinical effect. Benzodiazepine effects may persist for at least 24 hours. |
| **SIDE EFFECTS AND MANAGEMENT** | * Agitation, anxiety and fearfulness upon awakening. * Seizures may occur in regular benzodiazepine users. * Side effects usually subside rapidly without need for treatment due to short duration of action. |
| **MONITORING** | * Monitor respiratory rate AND conscious level as per Trust Resuscitation Policy Appendix 6. * Maintain at least 15 minute observations for a minimum of 2 hours after initial flumazenil dose. Aim for RR>10 bpm, AVPU= A. Continue to monitor until respiratory rate returns to baseline level. * Calculate hourly NEWS2 for at least 6 hours after the last dose of flumazenil. * If respiratory rate does not return to normal or patient is not alert after initial doses given, then assume sedation due to other causes. * In event of initial improvement but then further deterioration, consider further bolus doses of flumazenil at previously therapeutic doses or an infusion (consult product literature). Continue close patient monitoring.   AVPU scale = (Alert, Voice, Pain, Unresponsive) scale, NEWS2 = (National Early Warning Score) |
| **ALWAYS READ IN CONJUNCTION WITH THE CURRENT BNF DOSING GUIDANCE, HPFT RAPID TRANQUILISATION POLICY AND RESUSCITATION POLICY.** | |

**References:**

* BNF online accessed 14/07/2021<https://bnf.nice.org.uk/drug/flumazenil.html>
* BNFc online accessed 14/07/2021 <https://bnfc.nice.org.uk/drug/flumazenil.html>
* Electronic Medicines Compendium (eMC) – Product of Summary Characteristics (SPC) of Flumazenil 0.1mg/ml solution for injection (Hameln pharma ltd) accessed 14/07/2021 <https://www.medicines.org.uk/emc/product/6300>

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| **Appendix 10** |

**HALOPERIDOL ADMINISTRATION – ORAL & INTRAMUSCULAR EQUIVALENT DOSES**

Oral and IM haloperidol are not bioequivalent. The IM dose of haloperidol has a greater bioavailability than the oral dose, therefore the

equivalent dose for each route of administration are different. The bioavailability from the oral route is about 60% of that from the IM route.

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| **Maximum dose in 24 hours:** |
| **If only oral form prescribed: 20mg** |
| **If only IM form prescribed: 12mg** |
| **If oral & IM forms prescribed in combination, refer to table below for total daily dose** |

Please use the conversion chart below if a patient has received both haloperidol IM and oral in the last 24 hours, to calculate how much the patient had received in total:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **APPROXIMATE EQUIVALENT DOSES (mg)** | | | | | | | | | | |
| **Oral Haloperidol** | 0.5 | 1 | 1.5 | 2.5 | 4 | 5 | 7.5 | 8 | 10 | 12.5 | 17 |
| **IM Haloperidol** | 0.3 | 0.5 | 1 | 1.5 | 2.5 | 3 | 4.5 | 5 | 6 | 7.5 | 10 |

***For example:***

Patient has been given 1 x 5mg haloperidol **IM,** followed 30 minutes later by 5mg **orally**, then 30 minutes later by another 5mg **orally**.

Convert to all **oral** doses, i.e. 8mg + 5mg + 5mg = 18mg **oral** equivalent

OR

Convert to all **IM** doses, i.e. 5mg + 3mg + 3mg = 11mg **IM** equivalent

**NOTE: Each route of administration should be prescribed as a separate entry on the prescription chart**

The BNF states that the maximum licensed dose for oral is 20mg, and for IM is also 20mg which is a relatively much higher dose.

NB. Haloperidol causes EPSEs and QTc prolongation in a dose dependent manner.

Reference – SPC Haldol <http://emc.medicines.org.uk>

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| **Appendix 11** |

**Drugs known to prolong QT Interval 5,10**

**Some antipsychotics, particularly parenteral haloperidol is known to increase the QTc on the ECG, even at therapeutic doses. A QTc of greater than 500ms is associated with an increased risk of torsades de pointes and sudden cardiac death.**

**As well as the medication known to cause QT prolongation it is important to consider the service user or conditional risk factors.**

**Conditional Risk factors include:-**

* **Parenteral medication (IM or IV)**
* **Excessive doses**
* **Cardiac disease esp. congenital long QT**
* **Electrolyte disturbances esp. hypokalaemia, hypomagnesaemia and hypocalcaemia**
* **Extremes of age**
* **Concomitant administration of enzyme-inducing or enzyme-inhibiting drugs (macrolide antibiotics, antimalarials, antiarrythmics)**

**Effects of antipsychotics on QTc**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No effect** | **Low effect** | **Moderate effect** | **High effect** | **Unknown effect** |
| Lurasidone | Aripiprazole  Asenapine | Amisulpiride | Any intravenous antipsychotic | Pipotiazine |
|  | Clozapine | Chlorpromazine | Pimozide | Trifluoperazine |
|  | Flupentixol | Haloperidol | Sertindole | Zuclopenthixol |
|  | Fluphenazine | Levomepromazine | Any drug or combination of drugs used in doses exceeding recommended maximum |  |
|  | Loxapine | Quetiapine |  |  |
|  | Perphenazine |  |  |  |
|  | Prochlorperazine |  |  |  |
|  | Olanzapine |  |  |  |
|  | Paliperidone |  |  |  |
|  | Risperidone |  |  |  |
|  | Sulpiride |  |  |  |

**Summary**

In the absence of conclusive data, assume all antipsychotics are linked to sudden cardiac death.

Prescribe the lowest dose possible and avoid polypharmacy/metabolic interactions.

Perform ECG on admission and, if previous abnormality or additional risk factor, at annual check-up.

Consider measuring QTc within a week of achieving a therapeutic dose of a moderate /high risk antipsychotic.

*For further guidance refer to HPFT Physical Health Policy*

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| **Appendix 12** |

**Drug Choice in Pregnancy1,5,7**

**Clinicians should check with an up-to-date source of information before prescribing in pregnancy.**

**Obtain advice from a specialist perinatal Consultant Psychiatrist (currently Dr. S. Joshi), local medicines information service or medicines information services listed on the front cover of the BNF or directly with manufacturers’ databases.**

**Specialist drugs in pregnancy advice can be obtained from the United Kingdom Teratology Service (UKTIS). Healthcare professionals can contact UKTIS by telephone on 0344 892 0909. The telephone service is available between 08.30 – 17.00 Monday – Friday (excluding bank holidays) for routine enquiries. Urgent enquiries are answered 24 hours per day, seven days per week.**

**Website for United Kingdom Teratology Service is** [www.uktis.org/](http://www.uktis.org/)

**NICE Clinical Guideline - Antenatal and postnatal mental health: clinical management and service guideline7 gives information about use of individual drugs in pregnancy**

[**https://www.nice.org.uk/guidance/cg192**](https://www.nice.org.uk/guidance/cg192)

The safety of psychotropics in pregnancy cannot be clearly established because robust, prospective trials are unethical. Individual decisions are dependent upon an imperfect retrospective database and an assessment of the risks and benefits associated with withdrawal or continuation of drug treatment. The service user’s view of risks and benefits will have paramount importance. Possible effects on the unborn child should be discussed if possible with a mother who requires acute or maintenance treatment. Risks should be weighed up against possible benefits.

**General principles of prescribing in pregnancy**

* Good practice in relation to prevention of behavioural disturbance and de-escalation techniques must be followed
* Only treat when absolutely necessary (potential benefit outweighs potential harm), but remember that mentally ill women who are pregnant are very likely to require treatment.
* Ensure that the prospective parents are as fully involved as possible in all discussions.
* Always consider the risk of relapse when discontinuing psychotropics – relapse may ultimately be more harmful to the mother and child than continued, effective drug therapy.
* Try to avoid all drugs in the first trimester when major organs are being formed.
* Use an established drug at the lowest effective dose and avoid polypharmacy whenever possible.
* Be prepared to adjust doses as pregnancy progresses and drug handling is altered.
* Be aware of potential problems with individual drugs around the time of delivery.  
  Ensure adequate foetal screening during pregnancy and monitor the neonate for withdrawal effects after birth.  
  Document all decisions.

**Rapid Tranquillisation (RT)**

Women who are at a known risk of relapse and attendant behavioural disturbance should have a clear plan in their records as to how this will be managed (including what medication might be used) and this plan should be shared with all professionals and services who work with the woman.

The aim of rapid tranquillisation is to:

* Avoid prolonged physical intervention.
* Prevent/reduce harm to woman physically and psychologically.
* Prevent harm to others including the fetus/infant.

A pregnant woman requiring rapid tranquillisation should be treated according to the NICE guidelines NG101 and BAP NAPICU guidance5, except that:

* Restraint procedures should be adapted to avoid possible harm to the foetus
* When choosing an agent for rapid tranquillisation in a pregnant woman:-
* an antipsychotic or a benzodiazepine with a short half‑life should be considered;
* if an antipsychotic is used, it should be at the minimum effective dose because of neonatal extrapyramidal symptoms;
* if a benzodiazepine is used, the risks of floppy baby syndrome should be taken into account.
* A pregnant woman should never be put in seclusion and should not be left alone after rapid tranquilisation until examined by a midwife
* Following any rapid tranquilisation a pregnant woman should be examined by a midwife to check the foetal heart rate and to check whether she has gone into labour
* During the perinatal period, the woman's care should be managed in close collaboration with a paediatrician and an anaesthetist.

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| **Appendix 13** |

**Below appendix has been taken from CPAC Recorded Guidelines when Cohorting Service Users on Inpatient Wards for Prevention and Management of Acute Disturbance in the context of COVID-19 – Appendix 5**

[(Please click here for link to original document)](https://hertfordshirenhs.interactgo.com/Interact/Pages/Content/Document.aspx?id=6304)

**Prevention and Management of Acute Disturbance in the context of COVID-19**

|  |
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| 1. **Introduction**   This guidance relates to the stages to be used when managing behaviours which challenge and are associated with suspected or confirmed COVID-19.  This guidance should also be referenced against the following:   * Management of Violence and Aggression Policy * Recorded Guidelines when Cohorting Service Users on Inpatient Wards * Inpatient swabbing guidance * Seclusion and Long Term Segregation (LTS) Policy * Personal and Protective Equipment (PPE) guidance * Chapter 26 of the Mental Health Act (MHA) Code of Practice, Department of Health (2015) MHA 1983 * Safewards interventions * National Association of Psychiatric Intensive Care Units (NAPICU) guidance * Rapid Tranquilisiation Policy. |
| 1. **Legal and Ethical Issues**   Every service user should be reviewed on an individual case by case basis, ensuring that interventions are the least restrictive and in their best interests. When there is a suspected or confirmed case of COVID-19, the Trust’s cohorting guidance and key principles should be followed.  Isolating service users owing to suspected or confirmed COVID-19 in inpatient settings may be challenging for all those involved, particularly where the service user refuses to be isolated. This needs to be managed safely to protect service users and staff from transmission and risk of physical injury within legal constraints, including their obligations under the Human Rights Act (1998).  The multi-disciplinary team (MDT) should determine appropriate use of the relevant legal framework on a case-by-case basis, and seek support from medicolegal colleagues as required. The key human right that is at risk when considering the management of people, who will not self-isolate, is the Right to Liberty, which is a limited Right and any restriction on this Right has to be lawful, necessary and proportionate.  Blanket restrictions must not be imposed, but the use of the MHA may offer authority for enforcing social distancing and isolation of symptomatic service users, particularly where their refusal is a symptom or a manifestation of their mental disorder. It is vital that these powers are used with regard to the principles of the MHA Code of Practice. While the NHS and social care are facing unprecedented challenges relating to COVID-19, health and care services and professionals must continue to guard against overly restrictive practice.  Where legal and ethical issues require resolution the following process should be followed via the following recommended actions:   * Refer back to good practice principles * Undertake a MDT- include a senior manager, a consultant and a senior nurse (this may be a Clinical Lead Out of Hours) * Ensure that the decision making process is clearly documented (no blanket statements) * Evidence how the decision was reached (using the checklist in Appendix 2 of the Cohorting Guidance) * If the clinical issue is not resolved, then escalate it to the Strategic Business Unit’s (SBU) senior management for wider discussion * If the situation requires a legal view point, then discuss with the Trust’s Mental Health Legislation Team and also with Tactical Command * If the situation cannot be resolved, discuss further with Tina Kavanagh who can then contact Public Health England to enquire if they can assist with Schedule 21 powers. |
| 1. **Primary Interventions - proactive approaches to prevent violence and aggression upon admission**   **Upon admission**  Past experiences should be considered and an assessment completed, to include risk of violence, trauma history and treatment history including factors that raise anxiety or trigger behaviours which challenge. Inability to read non-verbal communication, because of face coverings or diagnosis such as Learning Disability or Autism can raise anxiety and escalating behaviour. The use of pre-prepared information in an easy read format, alongside on-going reassurance is useful *(see Safewards interventions).*  **Managing anxiety and distress**  Improved communication through notice boards, written communication, groups, text, and digital messaging is an option. Individuals may be fearful of COVID-19 which can be stressful. Removing ward activities can be counterproductive and wards should adapt communal activities, avoiding unnecessary large group gatherings and also to increase personal space. Anxiety may affect tolerance and self–awareness, increasing the risk of frustration and conflict *(see Safewards interventions).*  **Assessing Capacity**  A service user identified as an infection risk, may need to be in isolation. If refusing or unable to cooperate, the service user’s capacity should be considered and a record made of this *(see Recorded Guidelines When Cohorting Service Users on Inpatient Wards, Appendix 2: COVID -19 Checklist for Isolation).* |
| 1. **Secondary Prevention – active interventions being used to reduce harm relating to violence and aggression**     **Early Interventions**  Include early interventions to minimise and resolve concerns when they occur to manage risk of conflict, through the use of timely risk assessment that offers clear and guided safety plans. This should focus on the use of the least restrictive interventions, jointly planned with the service users where possible.  **Legislative Guidance**  The Management of Disturbed Behaviours is covered in Chapter 26 of the MHA Code of Practice, Department of Health (2015), also referenced in the Trust’s Management of Violence and Aggression Policy. Where there is any departure from the Code of Practice, clear robust MDT documentation must be completed to justify the management plan.  **Support Plans**  The ward should have a clear method of identification of service users who may present risk if suspected or infected by COVID-19 and showing signs of behaviours that challenge. This should be based on a robust checklist of symptoms and COVID-19 testing wherever this is possible. *(See Cohorting Service Users on Inpatient Wards Appendix 2: COVID-19 Checklist for Isolation)* alongside a support plan. |
| **Tertiary Intervention – Reactive intervention to manage violence and aggression**  Tertiary interventions should include a process of de-brief and post incident supportdesigned to reduce the impact of potential trauma, through approaches such as Huddles, SWARMs and individual support. An individual service user, who is positive for COVID-19 and experiencing acute mental and behavioural disturbance, may inadvertently increase the infection risk to others; this may involve physical resistance and a proportional response is required to manage the situation.  In these circumstances, this could be considered as disturbed behaviour in the context of their mental disorder representing a significant risk to others. This should be managed using the least restrictive and last resort interventions, where alternatives have been explored to manage these exist. Justification for Seclusion or LTS on for those with a mental disorder, who are detained under the MHA (1983) or where there is consideration to assessing them under the MHA(1983) - falls under the safeguards detailed in the MHA Code of Practice 2015, which is cross referenced in the Trust’s Seclusion and LTS Policy.  **Assessment and review of Long Term Segregation and Seclusion**  This guidance does not provide authority for service users presenting with the risk of infection to others with COVID-19 to be secluded or placed in LTS for this risk alone. Least restrictive options must be employed wherever possible. The application of the MHA Code of Practice 2015 should be considered in the context of The Coronavirus Act 2020 (in particular Schedule 21). Whilst these measures may not be considered proportionate to those within the MHA Code of Practice 2015, they may offer a cogent reason to depart from the Code and provide rationale for this. Where there are such departures from the MHA Code of Practice 2015 required, every effort should be made to ensure the principles of the MHA Code of Practice 2015 and the related safeguards are followed.  Where isolation is required for infection prevention and purposes only and the service user disagrees but does not actively resist the isolation care plan, this may not reach the threshold for seclusion. If their refusal to isolate is a result of their mental disorder or a symptom or manifestation of their mental disorder, then the MHA may be used to isolate or seclude them.  Where risk of infection has been robustly established, it could be considered as a cogent reason to depart from the Code’s definition of seclusion, providing that the service user is willing to cooperate and/or not physically actively resist the isolation care plan. It is possible that there may be no alternative to using bedrooms or locking off areas of a ward.  **PPE**  Any use of PPE must be worn in line with Trust guidelines when undertaking restrictive practices, such as restraint.  **Monitoring in Seclusion, Isolation and Longer Term Segregation**  Specific care plans around diet, fluid intake and activities of daily living should be developed. Contact with relatives should be encouraged via electronic means, to establish contact and links with wider family and friends. The Trust’s Seclusion and LTS Policy must be adhered to at all times.  **Medication use for acute disturbance**  Medication should follow the Trust’s [Rapid Tranquilisation guidance](https://hertfordshirenhs.interactgo.com/Interact/Pages/Content/Document.aspx?id=2209) but require some additional consideration to the specific contra-indications and side effects that are known with COVID-19 and other infections. Importantly, the current physical health of the service user is a key factor in the choice.  If suspected or diagnosed COVID-19 and acutely disturbed, with no signs of respiratory compromise (decreased or increased respiratory rate), cardiovascular disease or decreased level of consciousness; then medication can be used with caution, as the full effects of COVID-19 are still unknown. Consider short acting medication as service users physical health condition may rapidly deteriorate.  Ensure the medication for acute disturbance is an effective dose, as an ineffective dose may lead to the increased need for additional injections. Oral medication should be offered as the first choice. Parenteral medication is more likely to cause dose-related side effects, such as respiratory depression, postural drop, the QTc prolongation and extra-pyramidal side effects (EPS).  COVID-19 affects the respiratory function. Psychotropic medications, especially benzodiazepines, can cause respiratory depression. Benzodiazepines should not be used when a service user has acute pulmonary Insufficiency. Promethazine is a suitable alternative for service users in whom respiratory function is compromised or in those sensitive/tolerant to Benzodiazepines.  Lorazepam would be the preferred Benzodiazepine as it has a shorter half-life. Simultaneous injections of Olanzapine and Benzodiazepines can result in excessive sedation and cardiorespiratory depression so must be given at least an hour apart. **Ensure immediate access to Flumazenil is available if Benzodiazepines are given**. If there is evidence of cardiovascular disease, including a prolonged QTc interval, or no recent electrocardiogram (ECG), avoid intramuscular haloperidol combined with intramuscular Promethazine. Consider intramuscular Olanzapine or intramuscular Lorazepam.  Febrile individuals with a history of seizures may have their seizure threshold altered by some medications. Medical advice should be sought if there is any doubt. All antipsychotics can cause Neuroleptic Malignant Syndrome (NMS). If NMS occurs, immediately discontinue antipsychotics and other drugs that may contribute to the underlying disorder, monitor, and treat symptoms, and treat any concomitant serious medical problems.  Physical health monitoring, especially respiratory rate and level of consciousness should be carried out when either oral or parenteral rapid tranquillisation is given. |
| *July 17th 2020. V1. A. Cashmore, T.Kavanagh, R.Talbot, A.Berry, Dr J. Sutcliffe, J.Vincent, Dr D. Vekaria, Dr S.Syed* |

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| **Appendix 14** |

**Rapid Tranquillisation (RT) Checklist for Staff**

Service User Name: …………………………………….. Date:……………

NHS No/PARIS ID:……………………………………… Ward:…………...

**PRE-RT**

* Capacity/ MHA status noted and recorded
* Doctor involved
* Prescription chart review
* Medical History (including allergies & sensitivities) / Physical Health

(including urine drug screen & ECG for antipsychotics) Review

* Advance decisions/statement

**POST–RT**

* EPR documentation
* Physical monitoring completed and documented

(as per monitoring sheet)

* Inform the team doctor/duty doctor
* Prescription chart reviewed re: regular medication
* Team debrief
* Incident form completed via Datix
* Handover to clinical team (if out of hours)
* Update risk assessment and care plan
* Reassure service user / discuss how to manage

further similar incidents (should be recorded in notes under “debrief”)

* Finalise the RT monitoring form (RT outcome)

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| **Appendix 15** |

**Rapid Tranquillisation (RT) Monitoring Sheet**

It is important that the following monitoring is completed for all individuals who are administered medication for RT; this is because high stress levels, hyper-aroused physical state, restraint, agitation and hypokalaemia can all place the person at high risk of developing cardiac arrhythmias, in addition to other known adverse effects associated with prescribing medication indicated for RT.

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| **Service user name:** | **NHS no:** | **Ward/Unit:** |
| **Trigger(s) & reason for use:** |  |  |
| **Nurse signature:** | **Print name:** | **Date:** |

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| **Time** | **Alertness**  **(ACES)** | **NEWS 2 Completed** | | **Soft Measures Completed** | | **Fluid**  **offered**  **(mls)** | **Fluid**  **taken**  **(mls)** | **Nurse**  **signature** |
| **Yes** | **No** | **Yes** | **No** |  |  |  |
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| **Outcome of RT episode:**  **Signature: Date: Time:** |

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