RAPID TRANQUILISATION POLICY

1. INTRODUCTION & DEFINITIONS

Partnerships in Care (PiC) requires safe practices to be adopted when medication is used for Rapid Tranquilisation (RT). This policy provides guidance to all staff on the use of Rapid Tranquilisation to control acute behavioural disturbance within in-patient areas and enable PiC to carry out its duty in safeguarding the wellbeing of patients in its care who are in need of RT.

This policy should be read in conjunction with NICE Clinical Guideline 25 February 2005, Violence – the short-term management of disturbed / violent behaviour in psychiatric in-patient settings and emergency department. Clinicians should be vigilant regarding future updates of NICE guidelines.

This policy should also be used in conjunction with the following policies:

- PiC Operational Policy – *Resuscitation Guidelines*
- PiC Operational Policy – *Physical Healthcare*
- PiC Operational Policy – *The Safe & Therapeutic Management of Violence & Aggression*
- PiC Operational Policy – *Safe & Supportive Observation*
- PiC Operational Policy – *Reviewing Incidents and Untoward Occurrences*
- PiC Operational Policy – *Assessment & Management of Clinical Risk*
- PiC Operational Policy – *Mental Capacity Act*
- PiC Operational Policy – *Advance Decisions / Directives & Advance Statements of Wishes & Feelings*
- Local policy on consent to treatment
- Local policy on the safe handling & administration of medicines

RT is a pharmacological strategy used to manage disturbed behaviour in inpatient settings, however, the use of drugs is only one component in the management of behavioural disturbance and associated risks. In fact, RT should not be a first line strategy in the management of disturbed or violent behaviour. It should only be considered after other appropriate psychological and behavioural strategies such as de-escalation, have failed to reduce the disturbed behaviour. It is a treatment of last resort.

RT is used to calm the patient and reduce the risk of violence and harm, rather than treating the underlying psychiatric condition. An optimal response would be a reduction in agitation and aggression without sedation. Ideally the drug should have a rapid onset of action and few side effects.

The precise definition of RT is somewhat unclear at the boundary with ordinary tranquilisation. In some definitions any administration of prn or stat medication (including oral) with a sedative effect would constitute rapid tranquilisation. An alternative view is that only the use of intramuscular or intravenous agents of a sedative nature constitutes rapid tranquilisation. The pragmatic position in terms of the

need for special monitoring probably lies between these extremes and any patient who is rendered non-ambulatory or very drowsy by prn or stat oral medication and all patients given intramuscular or intravenous sedative medication should be regarded as undergoing rapid tranquilisation. It should be stated that NICE guidelines encourage use of oral medications as first line for RT.

What constitutes RT is an area of significant interest in RT practice and research, especially when the oral route of administration is used. The intention of the drug administering clinician usually a qualified nurse on the use of psychotropic should be clearly recorded in the clinical notes. In addition RT events must be entered into the Rapid Tranquilisation Register (RTR) and when significant on to the incident reporting system (IRIS). This will ensure a record keeping of a critical care (significant events) practice and facilitate the organisation's ability to trace and audit such practice. The latter is a requirement by NICE guidelines on the management of violence (NICE Guidelines NG10: Violence and aggression: short-term management in mental health, health and community settings).

There is no completely safe or completely effective RT regime. There is always a need to make a clinical assessment and judgement in balancing various risks in individual cases. A gold standard medication for rapid tranquilisation has not yet been established.

Rapid tranquilisation can become prolonged tranquilisation depending on the drugs administered, their half lives and individual patient susceptibilities so monitoring may have to continue for some time. The general rule is that monitoring should continue until patient is conscious and ambulatory. In all cases medical advice must have been agreed or be sought from the RC or duty psychiatrist prior to use of RT.

In the synthesis of this policy, we made use of other Guidelines from NHS Trusts within England. These include: Northamptonshire Health Care NHS Trust, Central and North West London Mental Health NHS Trust, Norfolk Mental Healthcare NHS Trust, North East London Mental Health Trust, South West Yorkshire Mental Health NHS Trust, Sussex Partnership NHS Foundation Trust The RT policy, Derbyshire Mental Health Services NHS Trust Guidelines for the management of the acutely disturbed patient, Coventry and Warwickshire Partnership Trust. Medication for RT and challenging behaviour.

2. PROCEDURE

2.1 Assessing Needs for RT

The need for RT requires careful clinical judgement. Violence among psychiatric inpatients is predicted by florid psychotic symptoms particularly disorganisation behaviour, acute mania, lack of insight, anger & hostility and drug or alcohol intoxication.

Imminence of violence may be suggested by rapidly increasing verbal aggression or anger, perhaps associated with explicit threats of violence, changes or extremes of behaviour, and/or outward signs of inner tension.

When determining which interventions to employ, clinical need, safety of patients and others, and where possible advance decisions, should be taken into account.

Remember that an underlying condition does not necessarily predict response to RT or preclude RT. Violence need not be associated with psychosis for RT to be an appropriate therapy. Similarly, violence that is associated with psychosis may respond to non-pharmacological intervention.

2.2 Patient Assessment

Assessment of the patient prior to prescribing any medication for RT is essential and should include the following:

- Obtaining a relevant history
- Mental state examination
- Relevant physical examination where possible (***Appendix A***)
- Making a provisional diagnosis
- Consulting with other professionals and disciplines
- Establishing the legal framework, and
- Documenting the plan of care / treatment plan

There should be awareness and clear documentation in the clinical record of the following:

- Current and recent medication
- Past treatment
- Response and adverse reactions
- Possibility of illicit drug use and/or alcohol abuse
- Past medical history (especially cardio-respiratory disease, diabetes, previous history of venous / pulmonary thromboembolism)
- Medical illnesses, especially signs of acute confusional state (delirium), CNS infection, epilepsy and head injury
- Risk of violence
- Vital signs
- ECG findings
- Advance directive regarding treatment choices in an acute episode

If staff are aware that a patient has HIV, hepatitis or other infectious or contagious diseases, protocols regarding bodily fluids should be followed and the advice of the infection control personnel in the service should be sought. All suspected cases should be treated as if they are infected.

Individual care plans must detail staff responsibilities for rapid tranquilisation of patients who have disabilities, including those with physical or sensory impairment and/or other communication difficulties.

Clinicians should work closely with patients as early as possible, for example patients identified to be at risk of disturbed / violent behaviour should be given the opportunity to have their needs and wishes recorded. This should fit within the context of their overall care and should clearly state what intervention(s) they would and would not

wish to receive. This document should be subject to periodic review. If using interventions for the management of disturbed / violent behaviour:

- Try to ensure that the patient does not feel humiliated
- Explain the reasons for using the interventions at the earliest opportunity
- Reassess their care plan and help them reintegrate at the earliest safe opportunity
- Provide an opportunity to document their account in their notes as part of the debriefing process

2.3 Route of Administration

The NICE Guidelines recommend that oral medication should be offered before parenteral medication, but if parenteral treatment is necessary, the intramuscular route is preferred to the intravenous one. According to NICE the Intravenous administration should only be used in exceptional circumstances.

The **oral route** should be considered initially (and parenteral medication should be switched to the oral route as soon as possible). Oral medication is generally effective within 30-45 minutes. Sufficient time should be allowed for clinical response between oral doses of medication for rapid tranquilisation.

The **intramuscular route** (IM) is associated with greater bio-availability and more rapid absorption therefore the dose prescribed should be equivalent to half of the equivalent oral dose. Nevertheless, the IM route may not provide substantially quicker effects. Compared to the oral route, greater symptom relief may only persist for around 30 minutes. Sufficient time should be allowed for clinical response between intramuscular doses of medication for rapid tranquilisation. Further, medication must never be mixed in the same syringe.

The **intravenous route** of administration should only be used in exceptional circumstances under the supervision of a consultant.

Vital signs **must** be monitored after parenteral drug is administered. This is mandatory and recorded on **form RT1** (see ***Appendix A***). Blood pressure, pulse, temperature and respiratory rate should be recorded at 15 minute intervals and agreed by the multidisciplinary team, until the patient becomes active again. If the patient appears to be or is asleep, **more intensive monitoring** is required.

2.4 Drug Choice

The treatment protocol (***Appendix B***) is intended to be used for the majority of people. The evidence base for the most effective agents or combinations to use in rapid tranquilisation is weak because of the difficulty of doing controlled trials in the area.

If an advance directive has been made by the individual or a care plan covering rapid tranquilisation exists this should be seriously considered and if not followed the reasoning should be documented.

The individuals' previous response to medication should always be considered when deciding on the choice of drug to use during rapid tranquilisation.

There is limited number of high quality clinical trials to inform evidence surrounding the drugs used for rapid tranquilisation and their safety. Please refer to the BNF and product data sheet for more detailed prescribing and administration advice.

The normal procedures for prescribing practice continue to apply in RT situations. The oral and IM dosages will be written on different instructions, using a single dose rather than a range.

This policy endorses the following protocol which is made up of the following six steps:

Step 1: Consider non-drug measures including talking down, time out, extra nursing staff and appropriate environment (for example low stimulus environment). Patients who respond to these measures do not need to be on the RT Register.

Step 2: If above is unsuccessful, check the following parameters:

- Existing regular & prn prescribed medications & dosage
- Co-morbid physical illness (particularly cardiovascular)
- Previous response
- Impaired hepatic and/or renal functions
- Most recent ECG

Offer **oral medications**:

Lorazepam 2 mg or Promethazine 25-50mg ±

Olanzapine 10 mg or
Risperdone 2 mg or
Haloperidol 5 mg

Step 3: If there is no response after 30-60 minutes or the patient refuses oral medication, consider im:

Lorazepam† 1 or 2 mg ±
Olanzapine 5 or 10 mg or
Aripiprazole 5.25 to 15 mg or
Haloperidol 5 mg

If the person is considered to need IM benzodiazepine treatment, this should not be given until at least one hour after IM olanzapine administration.

Step 4: If no response after 60 – 120 minutes, consider revisiting step 3 as appropriate (not necessarily same doses but within the BNF dosage limits).

† Please refer to page 6 for alternative to im Lorazepam in the event of short supply

Step 5: If no response in 60 – 120 minutes consult senior doctor (consultant) for further advice. Options include **repeat step 4** or consider **other strategies.**

Step 6: **Other strategies:** these include:

- **Promethazine 50mgs im ± 5 – 10 mg haloperidol, OR**
- **Diazepam emulsion 10 mg iv (give slowly over 5 minutes, need to have resuscitation equipment at hand)**
- **Haloperidol 5-10 mg iv alone or with diazepam emulsion as above**

The following treatments are NOT recommended for rapid tranquilisation:

1. **im/iv chlorpromazine**: Chlorpromazine is particularly dangerous when administered IM. **IM chlorpromazine should not be used under any circumstances**.

2. **im Paraldehyde and Amylobarbitone**: The use of these drugs is not recommended and should be considered **only when all other treatment strategies have failed**. These drugs will not be stocked on any of the inpatient wards within PiC. The decision to use such agents should only be made following specialist advice**.** Very few episodes for RT should reach the point where these will need to be considered.

3. **Zuclopenthixol acetate** (Clopixol Acuphase): Zuclopenthixol acetate has no place in rapid tranquilisation due to its long onset and duration of action**.** NICE guidelines suggest that its use should only be considered as an option for RT when: it is clearly expected that the patient will be disturbed/violent over an extended period of time, a patient has a past history of good and timely response to zuclopenthixol acetate injection, a patient has a past history of repeated parenteral administration and an advance decision has been made indicating that this is a treatment of choice. It should never be administered to those without any previous exposure to antipsychotic medication.

4. **im Diazepam**: Diazepam should not be administered intramuscularly due to slow and erratic absorption, leading to an unpredictable response.

Alternatives to Parenteral Lorazepam

Clinicians may consider the following options when there is shortage or problems with the supply of lorazepam injection:

1. **Olanzapine i.m** (as per this RT policy)

2. **Promethazine i.m**: 25 – 50 mg im

Maximum dose 100 mg in 24 hours
Onset of sedation 1-2 hours
Half-life 5 – 15 hours
Time to peak plasma concentration 2 -3 hours

3. **Midazolam i.m: 2.5 – 7.5mg**
   History depending on age, and circumstances
   Repeat at 2 hourly interval if required
   Maximum dose 30 mg in 24 hours
   Half life 1.5 – 2.5 hours
   Time to peak plasma concentration 30 minutes
   Unlike lorazepam, no dilution with water or NaCl 0.9% is required

2.5 Patient Monitoring

Physical Observations should be carried out until the patient becomes active again.

The following should be monitored **continuously** (and documented regularly) during the period of restraint:

- Pulse
- Blood pressure
- Respiration rate
- Temperature
- Hydration levels
- Motor side effects

Where possible the patient should be cared for in the recovery position.

If the patient is asleep, a more frequent and intensive monitoring by appropriately trained staff is required and should be recorded in the appropriate documentation. Particular attention should be paid to the patient's respiratory effort, airway and level of consciousness.

NICE Guidance (Management of Violence, Feb 2005) advises that the patients are monitored **until they become active again.**

If verbal responsiveness is lost as a consequence of administration of medication, a level of care identical to that needed for general anaesthesia should be given. Resuscitation equipment and drugs, including Flumazenil, must be available and easily accessible where rapid tranquilisation is used.

Where patients are heavily sedated and immobile the risks of venous thromboembolism must be considered. Where possible patients should be encouraged to move around, take exercise and not remain in bed for long periods.

If the current BNF doses are exceeded it is particularly important that frequent and intensive monitoring of a calmed patient is undertaken with particular attention to:

- Regular airway checks
- Level of consciousness

- Pulse
- Respiratory effort
- Temperature
- Hydration

If a patient is secluded, the potential complications of rapid tranquilisation must be taken particularly seriously. **The NICE guidance states that, "because of the serious risk to life, [patients] who are heavily sedated or using illicit drugs or alcohol should not be secluded".** The patient should be monitored by "within eyesight" observations by appropriately trained staff.

Once the patient becomes settled, ECG monitoring is advisable and wherever possible a baseline ECG should be done. A repeat ECG should be conducted following the administration of antipsychotics, if high doses are used, when used in combination with lithium or antidepressants or any other medication known to prolong the QTc interval, or if the baseline ECG is abnormal, or if there is any clinical indication to repeat the ECG. All people who have haloperidol should have ECG monitoring.

Monitor electrolytes if not checked in the last 3-4 days. Check daily if the emergency persists**.**

2.6 Rapid Tranquilisation and Seclusion

The use of seclusion with RT is not absolutely contraindicated. However, the following advice should be carefully considered and followed:

- If the patient is secluded, the potential complications of RT should be taken into account
- The patient should be monitored by 'within eyesight' observation by an appropriately trained individual
- Once RT has taken effect, seclusion should be terminated
- Ensure compliance with PiC Policy, *Nursing Patients in Seclusion or Longer Term Segregation*

3. RISK SECONDARY TO DRUGS USED IN RT

Risks associated with benzodiazepines: these include, loss of consciousness, respiratory depression or arrest (benzodiazepine antagonist and flumazenil should be available). Intramuscular diazepam is erratically absorbed and should not be used.

Risks associated with antipsychotics. These include, loss of consciousness, cardiovascular complications e.g. arrhythmias, hypotension and collapse, seizures, specific adverse effects including – subjective experience of restlessness, (akathisia), acute muscular rigidity (dystonia), and involuntary movements (dyskinesia), neuroleptic malignant syndrome, chlorpromazine is a local irritant if given intramuscularly. There is also a greater risk of hypotension, cardiovascular complications and seizures.

Clinicians should be aware of such adversities and put in place appropriate management plan to contain any emerging risk.

4. LEGAL CONSIDERATIONS

Psychiatrists and other mental health professionals are guided by the Mental Health Act Code of Practice.

Valid consent – Consent is the voluntary and continuing permission of a patient to be given a particular treatment, based on a sufficient knowledge of the purpose, nature, likely effects and risks of that treatment, including the likelihood of its success and any alternatives to it. Permission given under any unfair or undue pressure is not consent – Code of Practice 23.31.

Common law – The Mental Capacity Act 2005 provides lawful authority for the treatment of a patient who is incapable of giving a valid consent. Patients may be treated under Section 5 of this Act if they lack capacity to consent and it is considered that the treatment is necessary, proportionate to the risks of harm they may otherwise suffer and is in their best interests. What is proportionate may include restraint, defined as the use or threat to use force to secure the doing of an act to which the patient resists and restrictions on the patient's liberty of movement, whether or not the patient resists (Section 6).

Three Months Rule – After the first three months, medications for mental disorder may be administered to a patient either:

- With his / her capable consent – this must be recorded on statutory Form **T2**
- If the administration is authorised by a SOAD (if the patient withholds consent or is incapable of giving it) – this must be recorded on statutory Form **T3**

In the case of a patient who has been detained and receiving medications for at least three months it will be unlawful to administer medications for mental disorder unless it is covered by a Form T2 or T3. The only exception to this is the rule is the case of urgent treatment, where MHA 1983 Section 62 may apply.

Section 62 – Urgent / Emergency treatment – In an emergency treatment may be given to a non-consenting patient in the following circumstances: If the patient is detained under the Mental Health Act and it is not possible to comply with the requirements of Section 58 (providing safeguards around compulsory treatment). Because of the urgency with which treatment needs to be given, medication may be given to a refusing or non-consenting/incapable patient without the Section 58 safeguards (in particular a certificate from a Second Opinion Appointed Doctor) if it is:

- Immediately necessary to save the patient's life, or
- Not being irreversible immediately necessary to prevent a serious deterioration of his/her condition or
- Not being irreversible or hazardous immediately necessary to alleviate serious suffering by the patient or

- Not being irreversible or hazardous immediately necessary and represents the minimum interference necessary to prevent the patient from behaving violently or being a danger to himself/herself or others.

Treatment plans – Treatment plans should be developed in collaboration with professional colleagues, the patient and his/her carer. This should form part of the CPA and incorporate:

- Advance decisions / statements
- Clear descriptions of the immediate and long term goals
- Clear indication of the treatments and methods
- The patient's progress and consent is monitored through regular reviews.

Medication – where possible and clinical situation allows, The British National Formulary's recommendations should normally be adhered to.

5. TRAINING

Staff need to be trained to anticipate possible violence and to de-escalate the situation at the earliest opportunity, and physical means of restraint or seclusion should be resorted to 'only after the failure of attempts to promote full participation in self-care'.

Training in the use and dangers of rapid tranquilisation is as essential as training in de-escalation and restraint. Health professionals should be as familiar with the properties of benzodiazepines as they are with those of antipsychotic.

Specifically, health professionals should:

- Be able to assess the risks associated with rapid tranquilisation, particularly when the patient is highly aroused and may have been misusing drugs or alcohol, be dehydrated or possibly be physically ill
- Understand the cardio-respiratory effects of the acute administration of these drugs and the need to titrate dosage to effect
- Recognise the importance of nursing, in the recovery position, people who have received these drugs and also of monitoring pulse, blood pressure and respiration
- Undertake annual retraining in resuscitation techniques
- Understand the importance of maintaining an unobstructed airway

Medical Staff should attend induction on RT. All medical staff should attend training annually.

Agency staff undertaking on-call duties should be checked for training and ensure that they have the appropriate training to carry out rapid tranquilisation if required.