

GUIDELINES FOR THE MANAGEMENT OF ACUTELY DISTURBED PATIENTS AND THE USE OF RAPID TRANQUILISATION

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Part one

Background

Guidelines for the Management of Acutely Disturbed Patients

These guidelines should be read in conjunction with the following complementary guidance which is available on the HUMBER NHS Trust Intranet: -

- Advance Directives
- Debriefing
- Control and Restraint
- Rapid Tranquillisation
- Observation Policy
- Seclusion / time out
- Mental Health Act
- Treatment of Drug / Alcohol withdrawal (in review)
- Management and administration of medicines
- CPR – Resuscitation Policy
- Search
- Serious Untoward Incident reporting

Introduction

Acute behavioural disturbance in psychiatric patients may require urgent treatment. This may result from psychotic symptoms, such as persecutory delusions or command hallucinations or alternatively from non – psychotic symptoms such as high levels of anxiety (Atakan and Davies 1997)

The Royal College of Psychiatrists guidelines on the Management of Imminent Violence (1998) identifies environmental factors including overcrowding, lack of privacy, lack of activities and long waiting times to see staff as playing an important role in increasing the likelihood of aggression and violence.

The short term management of disturbed (violent) behaviour in psychiatric in patient settings. NICE Guidelines February 2005 recommends:-

- Short term management – over 72 hours.
- Measures to reduce violence need to be based on comprehensive risk assessment and risk management.
- Risk assessment must be ongoing and care plans based on an accurate and thorough risk assessment.
- Actional tools and structured clinical judgement must be used in a consistent way to assist in risk assessment.
- Risk assessment must be multidisciplinary and reflective of the care setting.
- Risk factors must be communicated across care settings.
- Risk assessment should include an interview with the patient and where appropriate with carers.

- When assessing for risk of violence care needs to be taken not to make negative assumptions based on ethnicity. There should be awareness that cultural mores may manifest as unfamiliar behaviour that could be interpreted as being aggressive.

The clinical management of such problems involves elements including risk assessment to try to prevent the escalation of disturbed behaviour, “talking down” patients, containment and minimisation of risk to others. If non-pharmacological methods have failed to resolve the situation and oral medication is not an option then rapid tranquillisation with intramuscular or intravenous anti psychotics, benzodiazepines or other sedative drugs may be indicated.

General Principles for the Management of Disturbed behaviour

- 1 Where possible (in the form of an advanced directive) intervention strategies for the management of disturbed / violent behaviour should be negotiated with all patients at the point of admission to inpatient strategies. These strategies must be documented in the patients care plan and healthcare records, subject to agreement from the patient. A copy should also be given to their carer (NICE guideline – April 2004)
- 2 The initial response should be to provide structure, reduce stimulation and try to verbally reassure and calm the person (Osser and Sigadel, 2001).
- 3 Early intervention is desirable as disturbed behaviour can be calmed down by the use of de-escalation also described as ‘defusing’ or ‘talking down’. These techniques are defined as a set of verbal and non-verbal responses, which if used selectively and appropriately reduce the level of a person’s hostility by reducing anger and the predisposition to assaultive behaviour (Leadbetter and Paterson 1995).
- 4 Continuous observation may also be a useful method for managing patients representing an acute risk (see trust observation policy). Shugar and Rehaluk (1990) evaluated continuous observation and found brief episodes of observations for less than 72 hours can be effective and practical. Clinical review should take place if more than 72 hours of observation are required.
- 5 Behavioural interventions may also be useful with the aggressive patient (Corrigan et al 1993). These may include:
 - Diversional Activity
 - A safe designated area or room specifically for the purpose of reducing arousal and / or agitation must be provided (NICE guidance 2004). Use of a low stimulus environment, where staff support and counsel a patient for short periods (15mins) in a specifically allocated quiet area (Hyde and Harrower – Wilson 1994).
 - Self controlled ‘timeout’ – (see Trust Policy and Mental Health Act Code of Practice, Department of Health and Welsh Office 1993). Patients undergo short-term removal for a few minutes from over stimulating situations, the emphasis being on their control over the process, with the patient’s agreement and understanding of their care plan.
- 6 Physical means of restraint may be necessary. This should only ever be considered after the failure of attempts to promote full participation in self-care as described above. The most important criterion for its use is that control and restraint must be performed by staff who are fully trained to

apply it in a safe, rapid and effective manner. It is also recommended that at least 3 members of staff trained to these standards are available – (Royal College of Psychiatrists 1998) – See HUMBER NHS Trust policy.

- 6 Seclusion should only ever be considered as an emergency measure used to contain or deal with a situation on a short-term basis and when all other psychological, behavioural and pharmacological approaches have failed or are inappropriate. It differs from restraint in that all social contact and interaction is removed. The Mental Health Act Code of Practice defines seclusion as 'supervised confinement of a patient alone in a room which may be locked for the protection of others from significant harm' (Department of Health and Welsh Office 1999) – See HUMBER NHS Trust Policy.
- 7 In some cases police assistance may be needed. The police must be called if the patient is armed with any kind of weapon, as only the police should attempt to disarm the patient.
- 8 In some cases where individuals are acutely disturbed and a risk to themselves or others emergency medication is required – see guidelines re rapid tranquillisation.
- 9 The situation will be managed by the nurse in charge of the unit. As soon as the situation gives rise for concern the unit / on call doctor should be contacted to attend the unit immediately.
- 10 The senior nurse and operational services manager / on call manager must be informed immediately where the situation is considered to put patient and / or staff at risk and where there are implications for needing support such as extra staff, debriefing and related resources.
- 11 Where a patient's presentation requires additional intervention, transfer to an environment where Rapid Tranquillisation interventions can occur may need to be considered.
- 12 Transfer should only occur when the patient is detained under the Mental Health Act (1983).
- 13 Transfer of the patient should not occur by Car.
There should always be a nurse escort for the patient
- 14 If the patient is likely to be violent or dangerous the Police should be asked to assist in the conveyance, where possible an ambulance should be used otherwise a Police vehicle "suitable for conveying such a patient should be used" (M.H.A 1983 – Code of Practice D.O.H.1999)

Guidelines re :- Clinical Indications for the Use of Rapid Tranquillisation

Definition

Rapid Tranquillisation means the use of drug treatments to achieve rapid, short term behavioural control of extreme agitation, aggression and potentially violent behaviour that places the individual and those around them at risk of physical harm (Broadstock, 2001).

Aim

The aim of drug treatment in such circumstances is to calm the person / achieve sedation sufficient to minimise the risk posed to the person themselves or to others, rather than treat the underlying psychiatric condition. The individual should be able to respond to spoken messages throughout the period of sedation (Royal College of Psychiatrists 1999).

PRN V Rapid Tranquillisation

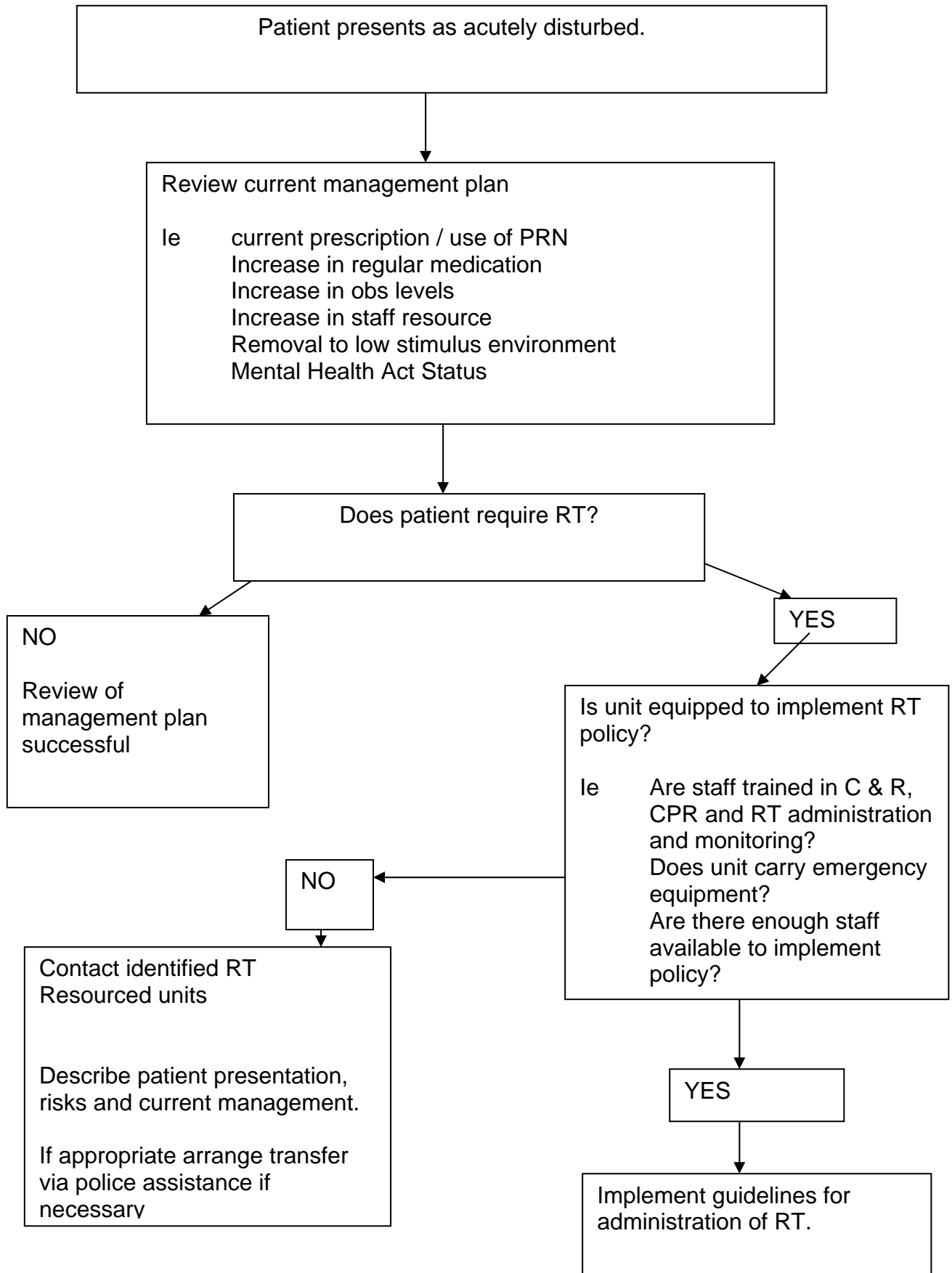
There is a clear distinction between Rapid Tranquillisation (which is a planned treatment intervention and which is likely to last for several hours or even days) and PRN treatment, which is usually based on sudden acute clinical need and may follow an unpredictable and continuing treatment course. In this acute clinical situation the accumulative doses of PRN and regularly prescribed medication may exceed BNF dose ranges and induce inappropriate side effects in combination. It is advisable therefore in the acute clinical situation that following one PRN treatment of antipsychotics e.g. Haloperidol and / or Benzodiazepines e.g. Lorazepam active consideration must be given to the suitability / unsuitability of instigating rapid tranquillisation as a planned therapeutic intervention.

The clinical decision to implement RT will be based on the following criteria:

- Has review of patients current management plan taken place. (See flow chart in clinical guidelines).
- Review unsuccessful RT required.
- Are there enough staff on the unit.
- Are staff trained as recommended in the guidelines.
- Is emergency equipment available / accessible.
- Is Flumazenil available / accessible.

If any of the above criteria is not met transfer to unit who meets the criteria must be considered. (See flow chart).

Management Pathway



General Principles / Implementation points in the use of Rapid Tranquillisation

The below points are adapted from the Royal College of Psychiatrists clinical practice guidelines on the management of imminent violence 1998, NICE Clinical Guideline –Schizophrenia Core interventions in Treatment and management of Schizophrenia in primary and secondary care – Dec 2002 and the short term management of disturbed (violent) behaviour in psychiatric inpatient settings (NICE guidelines April 2004)

Expected standards of good practice to be achieved.

- Be aware of General Principles / Implementation points before incidents arise.
- The most senior nurse on duty will take the lead with regards to the management of the situation and must be kept informed.
- A medical officer should be available at all times within ½ hour of an alert by staff.
- Take a history, from the patient and those who know the patient. And where possible collect information from previous contact with services
- Complete a mental state examination and a physical examination. Information from previous examinations should be made available.
- Consider age, previous history of adverse reactions to certain medications, drug interactions, concurrent medication, illicit drug use, signs of organic brain disorder and patient preferences e.g. Advance Directives.
- Establish a provisional diagnosis: is mental disorder present or likely?
- At the earliest opportunity, a full assessment including consideration of the medical and psychiatric differential diagnosis, should be undertaken in conjunction with the multi disciplinary team and a discussion as to whether or not emergency medication / rapid tranquillisation should continue as an intervention
- Consider legal status and follow correct procedure (See Mental Health Act 1983 and Department of Health Welsh Office Code of Practice 1999).
- Oral medication should be offered before parenteral use
See : **Clinical Pathway for Medical Staff in the Management of Acutely Disturbed Patients.**

- The total dose of medication prescribed must be reviewed at least every 24 hours by the responsible consultant or nominated deputy in conjunction with the multi disciplinary team.
- The multi disciplinary team should include a specialist mental health pharmacist.

Risks associated with Rapid Tranquillisation

Taken from the Royal College of Psychiatrists guideline on the Management of Imminent Violence (1998), NICE Clinical Guideline –Schizophrenia Core intervention in Treatment and management of Schizophrenia in primary and secondary care – Dec 2002 and the short term management of disturbed (violent) behaviour in psychiatric inpatient settings (NICE guidelines April 2004)

Staff should be aware of the following risks

- Inadequate sedation can risk patient exhaustion, dehydration and increases the risk of violence.
- Over sedation can lead to loss of consciousness or reduced alertness.
- Minor injuries and bruising may be present , especially if restraint has been used.
- Prominent side effects with other medication such as akathisia, Parkinsonian side effects, lower seizure threshold, respiratory depression or arrest, hypotension and cardiac complications, neuroleptic malignant syndrome.
- Possible damage to the patient – clinician relationship.
- Damage to the patient’s future concordance with maintenance treatment.
- Warnings concerning the complications of rapid tranquillisation should be taken particularly seriously if the individual is in seclusion. Due to the serious risk to life patients who are heavily sedated or using drugs or alcohol should not be secluded.
- Careful monitoring of the patient’s mental and physical observations is paramount. Tranquillisation should be immediately stopped and emergency medical attention called if: -
 - Respiratory rate falls below 10 breaths per minute
 - Pulse rate increases rapidly
 - Cyanosis develops
 - Systolic blood pressure falls to less than 80

Part two

Nursing Guidelines

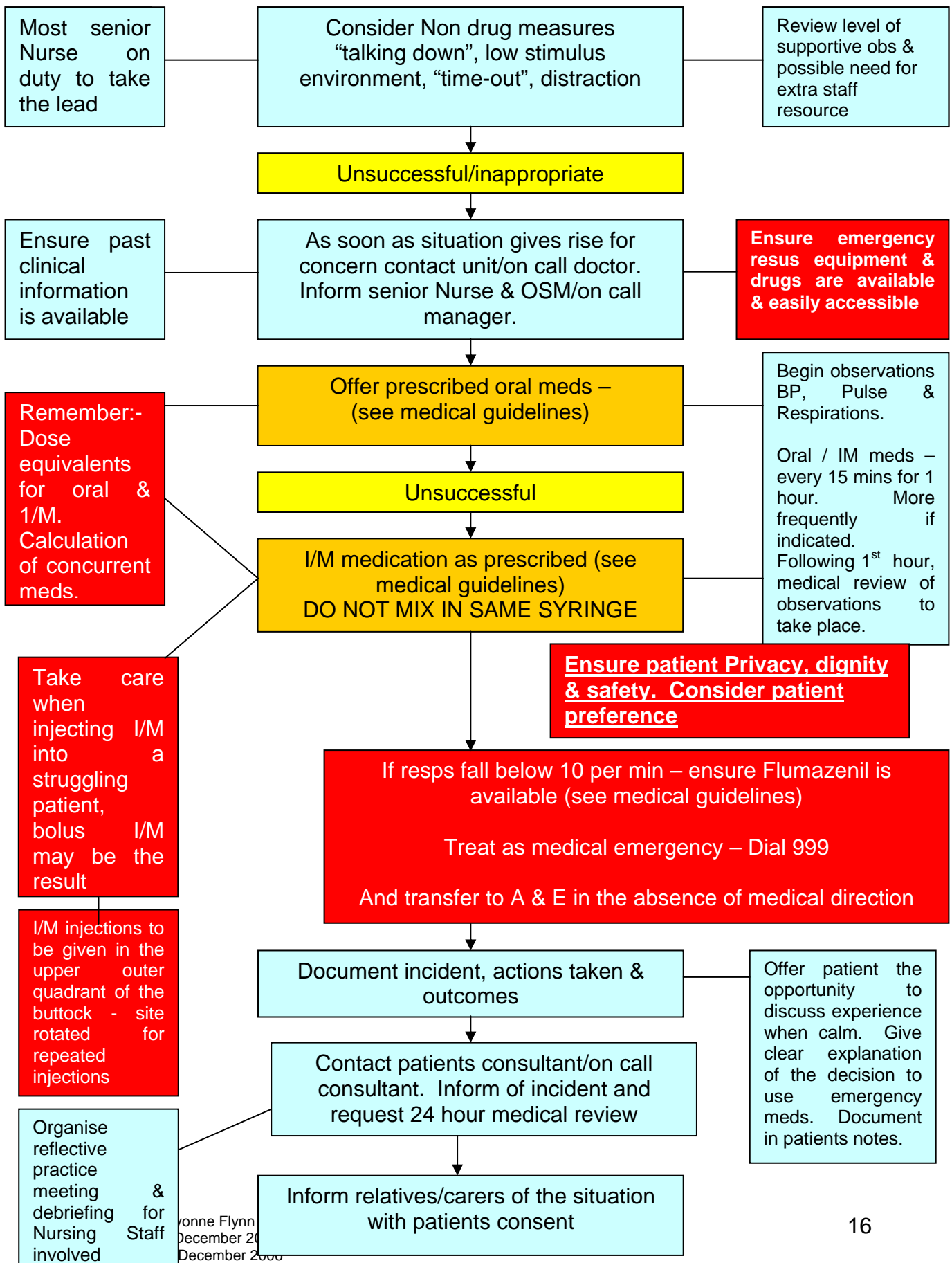
Clinical Pathway for Nurses in the Management of Acutely Disturbed Patients

1. The senior nurse on duty will take the lead with regards to the management of the situation and must be kept informed of any changes.
2. Plans for the management of individual patients who are acutely disturbed should normally be made in advance and in discussion with the multi - disciplinary team.
3. Consider de-escalation techniques e.g. “talking down” the patient. Attempt to verbally reassure and calm the patient.
4. Consider behavioural interventions: -
 - Diversional Activities
 - Time out
 - Use of low stimulus environment
5. Review level of supportive observation and the possible need for extra staff resources. Consider Patients Status under the Mental Health Act (1983).
6. As soon as the client behaviour gives rise for concern, contact the unit / on call doctor and request immediate attendance – ensure past clinical information regarding the patient is available.
7. Inform the Senior Nurse and Operational Service Manager / On Call Manager of the situation and possible implications for extra support and resources.
8. Ensure emergency resuscitation equipment and drugs are available and easily accessible.
9. Offer Prescribed oral medication.
10. If oral medication refused, I/M medication must be considered. Ensure calculation of concurrent medication administered is taken into consideration when doctors are prescribing emergency medication and or rapid tranquillisation. Also consider dose equivalents for medication prescribed when given orally or intramuscularly.
11. Intramuscular injections should be given in the upper outer quadrant of the buttock. The site should be alternated for repeated injections and Z tracking method to be employed.
12. The patient should be observed closely at all times. Blood Pressure, Pulse and respirations should be taken and monitored every 15 minutes

following intramuscular injections and every 15 minutes following oral medication unless otherwise is stated. Complete relevant observations documentation – medical review should take place following the first hour. It is the doctor's responsibility to decide whether observations can be discontinued or to specify what further observations are required.

13. If respiratory rate falls below 10 breaths per minute, treat as a medical emergency, dial 999 and transfer to the A & E department in the absence of medical direction.
14. Physical restraint may be necessary if behaviour is escalating. Refer to HUMBER Violence and Aggression policy guidelines.
15. If behaviour continues to escalate police assistance must be considered. The police must be called if the patient is armed or that the patient is suspected to be armed with any kind of weapon. Only the police should attempt to disarm a patient.
16. Document the incident clearly and fully. Outline the context i.e. Precipitants, victim, weapon, severity, actions taken, outcome and subsequent revisions to the management plan. Demonstrate the decision process and rationale for final actions taken.
17. Contact the patients Consultant / RMO / On Call Consultant and inform of the incident requesting urgent medical review which must be done within 24 hours of the incident.
18. Ensure privacy, dignity and safety is considered at all times. Consider patient preference.
19. Consider the appropriateness of visitors at this point. Inform relatives / carers of the situation with the patients consent.
20. The patient to be offered the opportunity to discuss their experience and provide with a clear explanation of the decision to use emergency medication. This should be documented in the patient's notes.
21. Nursing staff involved must be given the opportunity to reflect on the situation and be offered debriefing.- (See trust policy)
22. The use of seclusion should only ever be considered as an emergency measure and when all other approaches have failed.

Management of Acutely Disturbed Patients (Nursing Guidelines)



Nursing Care Guidelines following administration of emergency medication / Rapid Tranquillisation

- 1 A named nurse should be designated by the nurse in charge of the ward to observe the patient for the first hours after the administration of medication on an emergency basis and he / she be relieved of all other duties.
- 2 If medication is administered orally the designated nurse will record at 15 mins intervals for one hour the patients pulse, blood pressure, respiratory rate and level of consciousness.
- 3 If medication is administered I/M the designated nurse will record at 15 mins intervals for one hour (due to the increased risk of allergic response anaphylactic reactions) the patients pulse, blood pressure, respiratory rate and level of consciousness. In the frail, elderly, obese or those known to have heart disease more frequent obs may be indicated e.g. every 5 mins. Reasons for increased observation to be documented.
- 4 If the patient is asleep and unconscious the use of pulse oximeter to continuously measure oxygen saturation is desirable. A nurse should remain with the patient until they are ambulatory again.
- 5 If Haloperidol is administered temperature to be taken hourly for 3 hours.
- 6 The level of consciousness should be recorded on the following scale: -
 - 1 Awake and active.
 - 2 Awake and calm.
 - 3 Asleep but rousable.
 - 4 Asleep and unrousable.

Patients at conscious level 1 who are uncooperative do not need to have physical observations carried out as this may aggravate the situation. However if the patient's conscious level changes the observations must be instituted as above.

- 7 These observations should be recorded on the relevant record of nursing care. (see appendix 4 and 5). This includes details of drug and emergency medication dosage. Nursing actions also to be documented and any changes recorded e.g. from I/M to oral medication.
- 8 A doctor should be contacted if at any stage the patients observations become abnormal or if the conscious level descends to level 4. If resps fall below 10 per min treat as a medical emergency, dial 999 and transfer to A& E Department in the absence of medical direction.

- 9 Patients should not be placed in seclusion following emergency administration of medication. If seclusion is necessary and the patients conscious level drops to level 2 while in seclusion the need for seclusion should be reviewed immediately and if it drops to level 3 seclusion should be terminated.
- 10 At the end of the first hour following administration of medication a medical review must take place. It is the doctor's responsibility to decide whether observations can be discontinued or to specify what further observations are needed. Until this review is completed observations to be continued every 30 minutes.
- 11 Following the initial medical review the patient should be reviewed again every 6 hours for 24 hours.
- 12 Consultant / RMO to be contacted and informed of the situation. Request for full medical review within 24 hours to be made.

**Record of Nursing Care following emergency medication / rapid
tranquillisation**

Patients name: _____ Date: _____
 Date of Birth: _____ Time _____
 Time doctor contacted: _____ Drug and dosage: _____
 Patients approx weight: _____ Route:- oral, I/M or I/V _____
 Known physical complaints _____

Time Every 15 min	Pulse	BP	Resps	Temp	SATS	CL level	Comments Change of dose and route to be recorded	Nurse Sign

Medical Review

Time:

Signature:

CL = Consciousness Levels

- 1 – Awake and active
- 2– Awake and calm
- 3 – Asleep but rousable (some response to intervention)
- 4 – Asleep but unrousable (no response to intervention)

Part Three

Medical guidelines

Clinical Pathway for Medical Staff in the Management of Acutely Disturbed Patients.

- 1 Be aware of procedures before incidents happen.
- 2 Respond promptly to requests for medical attendance – must arrive on the unit within 30 minutes.
- 3 Take a history where possible collect information from the patient and those who know the patient.
- 4 Do a mental state examination and a physical examination if possible. Information from previous examinations should be made available.
- 5 Establish a provisional diagnosis: is mental disorder present or likely?
- 6 Establish legal status and follow correct procedures (see Mental health Act 1983 and Department of Health and Welsh Office code of Practice 1993)
- 7 Conduct a multi disciplinary discussion as to whether or not emergency medication / rapid tranquillisation is safe and appropriate.
- 8 Consider age, previous history of adverse reactions to certain medication, drug interactions, concurrent medication, illicit drug use, signs of organic brain disorder and patient preferences.
- 9 Oral medication should be offered before parenteral use. If there is no medical history of anti psychotics or unknown medical history, history of heart disease or current illicit drug intoxication consider oral Lorazepam, Olanzapine Velotabs . If there is confirmed history of significant typical anti – psychotic exposure (that is not just PRN) consider Oral Lorazepam , Olanzapine Velotabs, Haloperidol. Note for elderly / frail lower doses should be used. For recommended dosages always refer to most current BNF and trust pharmacy intranet site.
- 10 Use the minimum effective dose to achieve tranquillisation. Remember the aim is to achieve ‘calmness’ in the patient not sedation to the point of being unrousable.
- 11 If parenteral treatment proves necessary, the intramuscular route is to be preferred over intravenous from a safety point of view. Intravenous administration should only be used in exceptional circumstances and preferably avoided in the elderly.

- 12 Where behaviour disturbance occurs in a non-psychiatric context then it is preferable to use Lorazepam alone, either orally or intramuscularly.
- 13 Consider reviewing the patients legal status, consulting a senior colleague, starting / increasing regular anti psychotics (within optimal dosage range).
- 14 Consider dose equivalents for medication prescribed when given orally or intramuscularly. Also ensure calculation of cumulative dosages of concurrent medication of the same class when prescribing emergency medication / rapid tranquillisation.
- 15 Consider I/M Lorazepam / I/M Olanzapine or I/M Haloperidol . If no response wait 30 minutes and repeat to a maximum of 3 times. When using Olanzapine in conjunction with Lorazepam it is recommended that Olanzapine is given first with a 60 mins time interval prior to then giving Lorazepam. **Always refer to most recent BNF and trust pharmacy intranet site to check recommended dosages.**
- 16 Higher doses than those recommended may be required. In such cases senior advice should be sought. The on call pharmacist can also be contacted for information and advice. The rationale must be recorded in the patients care plan.
- 17 When using I/M Haloperidol (or any other I/ M conventional antipsychotic) as a means of behavioural control, an anticholinergic agent (e.g. Procyclidine) should be given to reduce the risk of dystonia and other extra pyramidal side effects.
- 18 Blood pressure, pulse and respiratory rate should be recorded every 5 minutes (Taylor et al 1996) following I/M medication and every 15 minutes following oral medication for the first hour. This is in acute medical crisis. In a psychiatric emergency it is more realistic and achievable to implement observations following both i/m and oral medication every 15mins unless more frequent observation is indicated.
- 19 At the end of the first hour following administration of medication a medical review must take place. It is the doctor's responsibility to decide whether observations can be discontinued or to specify what further observations are needed. Following this review the patient should be reviewed again every 6 hours for 24 hours. Document reviews.
- 20 If respiratory rate falls below 10 breaths per minute Benzodiazepine antagonist Flumazenil 200mcg must be given I/V over 15 seconds then 100mcg repeated every 60 seconds until cleared level of consciousness is obtained. Please note: Flumazenil has a short half-life and respiratory function once recovered may deteriorate again. Seizures can occur. Treat situation as a medical emergency

and transfer to A & E department. . **Always refer to most recent BNF and trust pharmacy intranet site to check recommended dosages.**

- 21 If disturbance continues – consult senior colleagues; consider Diazepam I/ V and / or Haloperidol I/V. Do not give I/V sedation to elderly patients in the absence of resuscitation equipment and staff trained to use, including defibrillator. Diazemuls may be considered to avoid injection site reactions. **For recommended dosages always refer to current BNF and trust pharmacy intranet site.**
- 22 Never use drugs you are unfamiliar with – seek advice and support – refer to policy document.
- 23 Document fully the incident, actions and outcomes.

TAKE NOTE:

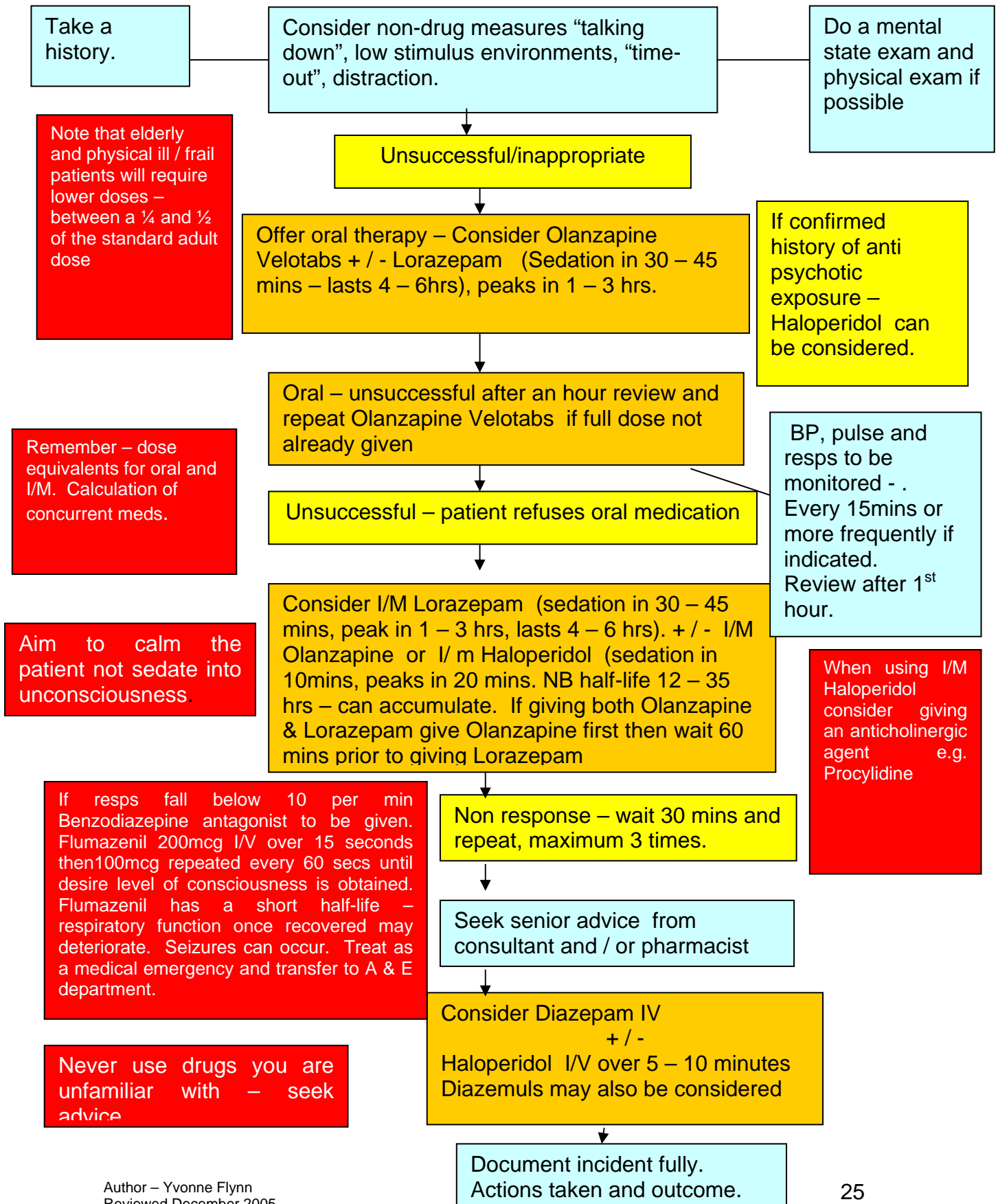
- I/M Diazepam should NOT be used (absorption slow and unpredictable)
- I/M Chlorpromazine should be prescribed with caution (crystallises in tissues and pro-arrythmogenic) and therefore it is recommended that Chlorpromazine is not used.
- Zuclopenthixol acetate is not generally recommended because its onset and length of action cannot always be predicted. For this reason it should never be given to highly aroused, struggling patients because of potential adverse effects on the myocardium. In addition because the drug may have an onset of action between 20mins and 3 hours after administration it limits the safe use of further medication.

However Zuclopenthixol Acetate may be considered as an option:-

- When it is clearly expected that the patient will be disturbed over an extended period of time.
- When the patient has a past history of repeated parenteral administration.
- When an advance directive has been made indicating that this is a treatment of choice.
- The BNF and manufacturers SPC must be consulted regarding its use.

MANAGEMENT OF ACUTELY DISTURBED PATIENTS (MEDICAL GUIDELINES)

Note – Please ensure you check recommended doses with BNF recommendations and trust pharmacy intranet site.



Guidelines for the Use of Flumazenil	
Indication for Use	If after the administration of Lorazepam or Diazepam respiratory rate falls below 10 / minute.
Contraindications	Patients with Epilepsy who have been receiving long term Benzodiazepines
Dose and route of administration	Initial: 200mcg intravenously over 15 seconds – if required level of consciousness not achieved after 60 seconds then subsequent dose 100mcg over 10 seconds
Time before dose can be repeated	60 seconds
Maximum dose	1mg in 24 hours (One initial dose and eight subsequent doses)
Side Effects	Patients may become agitated, anxious or fearful on awakening. Seizures may occur in regular benzodiazepine users.
Management	Side effects usually subside
Monitoring	
What to monitor?	Respiratory rate
How often	Continuously until respiratory rate returns to baseline level. Flumazenil has a short half-life (much shorter than Diazepam) and respiratory function may recover then deteriorate again. NOTE – If respiratory rate does not return to normal or the patient is not alert after initial doses then assume sedation due to some other cause.

Recommended Drugs and Dosage

The benefit of reducing the risk of harm to the individual or others must be balanced against the risk of adverse effects associated with such drug regimens. In a survey of around 100 incidents of rapid tranquillisation, Pilowsky et al (1992) found few adverse events, although those reported were potentially serious cardiovascular and cardio respiratory events. The cardiovascular effects of antipsychotics in such situations have become a source of growing concern. Osseur & Siagdel (2001) recommend that Chlorpromazine is avoided because of its greater risk of hypotension. Droperidol, an antipsychotic widely used for rapid tranquillisation was voluntarily withdrawn in 2001 because of reports of QT prolongation, serious ventricular arrhythmia and sudden death. A change in the rate corrected QT interval (QTc) on the ECG associated with an antipsychotic may be an indicator of cardiotoxicity. An increased risk of QT interval prolongation has been reported with several antipsychotic drugs (Royal College of Psychiatrists 1997). In a naturalistic study in the UK (Reilly et al 2002) a prolonged QTc was associated with both Thioridazine and Droperidol. Partly on the basis that QTc prolongation may be a marker of risk arrhythmia, the use of Thioridazine has been restricted in the UK since the end of 2000 and would not be appropriate for rapid tranquillisation. (Core Interventions in the treatment and management of Schizophrenia in Primary and secondary care September 2002 – Second consultation NICE – London)

NOTE: lower doses in elderly / frail and consider use of Risperidone as an alternative to Haloperidol.

Prior to prescribing staff are advised to consult the latest BNF and / or contact pharmacist for further advise if necessary.

Olanzapine Velotabs

- This atypical antipsychotic may be better tolerated than other antipsychotics; extrapyramidal symptoms and prolactin elevation may be less frequent than with older antipsychotics.
- For rapid control of behavioural agitation the use of Lorazepam as an adjunct can be useful. Recommended that period of 60 mins is given prior to use of Lorazepam following use of Olanzapine.

DOSE

For recommended dosages always refer to current BNF and trust pharmacy intranet site.

Haloperidol.

- Haloperidol is most commonly used in rapid tranquillisation, not only has it's use in rapid tranquillisation been best evaluated, it also has a good safety record. In fact, Haloperidol has been used to treat critically ill,

confused patients on medical and surgical wards (Adams 1988). The cardio respiratory safety of Haloperidol has been established, even in the coronary care unit (Tesar et al 1985).

- Haloperidol is long acting and so its use may avoid the need for frequent dosing. There is also little risk of hypotension.
- There is a risk of dystonia with high doses especially in young males. If high doses of Haloperidol are prescribed consider adding Procyclidine 5 mg i.m. stat. Should be given to reduce the risk of Dystonia and other extra pyramidal side effects.
- The use of Lorazepam as an adjunct is recommended, as it tends to lower the dose of Haloperidol required.

Dose

Always refer to most recent BNF or trust pharmacy intranet site. The lowest dose possible should be used.

Lorazepam.

- Lorazepam has a short half-life 8-24 hours. It is useful in increasing sedation when given as an adjunct to antipsychotics. It tends to decrease the amount of antipsychotic required.
- Do not mix with other drugs in the same syringe. Dilute Lorazepam with equal volume of water for injection.
- Lorazepam should be avoided in people with chronic respiratory disease or respiratory failure.
- Because of risk of addiction give stat doses if possible. Regular and prn prescriptions should be a team decision and need regular review.

Dose

Always to most recent BNF or trust pharmacy intranet site.

Caution- diazepam should never be given i.m. due to its prolonged and erratic absorption.

Flumazenil

The most serious complication in the use of benzodiazepines is respiratory depression due to sedation. Respiratory depression can be reversed by the use of the Benzodiazepine antagonist Flumazenil. Flumazenil is not an easy drug to use e.g. must be given IV, the half-life is short compared to the benzodiazepines and repeated doses may be required. Flumazenil may also precipitate withdrawal seizures in those with significant prior exposure to benzodiazepines.

Flumazenil must be given if the respiration rate falls below 10/ min. 200 micrograms given IV over 15 seconds then 100micrograms repeated every 60 seconds until desired level of consciousness is obtained. **Always check recommended dosage with most recent BNF and trust pharmacy intranet site.**

If resps fall below 10 per min nursing staff must treat as a medical emergency, dial 999 and transfer to A & E department in the absence of medical direction.

Other drugs for consideration

Zuclopenthixol acetate (acuphase)

- Should not be used in anti-psychotic naïve individuals.
- Zuclopenthixol acetate should never be given to a highly aroused, struggling patient because of potential side effects on the myocardium.
- Consider as an adjunct if: the patient is not anti-psychotic naive, is not receiving adequate regular antipsychotics, and has a history of previous psychotic disturbed behaviour.
- Zuclopenthixol acetate has a longer duration of action (2-3 days). It is useful in patients who are not settling on shorter acting antipsychotics and to avoid repeated injections. However, it is not quick acting and should not be prescribed for rapid tranquillisation.
- If maintenance treatment is necessary, change to an oral anti psychotic 2-3 days after the last injection or to a longer acting antipsychotic depot injection given concomitantly with the last injection of Zuclopenthixol acetate.

Dose

Always check recommended dosage with most recent BNF and trust pharmacy intranet site.

Special Circumstances to consider

NB – Prior to prescribing medical staff are advised to refer to the latest BNF and / or a pharmacist for confirmation of drug – drug interactions. Refer to www.emc.medicines.org.uk for further information.

Benzodiazepines and disinhibition

- It is important to be aware of the propensity to cause disinhibiting reactions. Paradoxical / disinhibiting / aggressive outbursts in the context of Benzodiazepine use:-
- Usually occur when high doses of high potency drugs are administered parenterally.
- Are rare in the general population but seen more frequently in people with impulse control damage and in the very young or very old.
- Usually occur in response to (very mild) provocation, the very nature of which is not always obvious to others.
- Is recognised by others but not by the sufferer.

Special situations

Organic brain syndromes

When disturbed behaviour is present, physical examination is difficult. However, a diagnosis of organic brain syndrome should be considered especially in the presence of altered level of consciousness and visual, tactile or olfactory hallucinations. Diagnosis and treatment of the underlying condition is essential.

Haloperidol can be used. However, prescribing should be cautious. **For recommended dosages always refer to current BNF and trust pharmacy intranet site.**

Drug intoxication

If this is suspected attempt to get a specimen of urine not blood for a drug screen. Treatment is as for other disturbed behaviour except in the case of LSD intoxication. It has been shown that antipsychotics can aggravate this condition. If there is a history of very recent LSD use give diazepam 20mg orally stat with a further dose of diazepam 10mg after 4-6 hours if not settling. Alternatively, i.m. Lorazepam may be used if the patient is uncooperative.

Alcohol intoxication

Medication should be avoided in this situation due to the potential for serious interaction of all tranquillising agents with alcohol.

Acute alcohol withdrawal

Disturbed behaviour in any setting may be exacerbated by alcohol withdrawal syndrome or may be the consequence of delirium tremens. The latter is a medical emergency and if suspected should be treated promptly following senior psychiatric and medical advice.

Any patient with suspected alcohol withdrawal syndrome should be fully assessed and if appropriate given symptomatic treatment with a reducing dose of Chlordiazepoxide. All patients with severe alcohol withdrawal symptoms should be prescribed parenteral thiamine especially if there is any suspicion of Wernickes encephalopathy (i.e. any evidence of ophthalmoplegia and / or nystagmus and / or ataxia and / or confusion.

Severe alcohol withdrawal including delirium tremens may be precipitated by head injury, dehydration or physical illness such as infection. These should be identified and treated as appropriate. Electrolyte abnormalities are common. The development of withdrawal seizures greatly increases the risk of developing delirium tremens. Delirium tremens should be treated with increased doses of Chlordiazepoxide, parenteral Thiamine and possibly anti convulsants.

Parkinson's Disease

The use of typical antipsychotics should be avoided in people with Parkinson's disease or cortical lewy body disease. Diazepam orally or Lorazepam should be the drugs of choice. **For recommended dosages always refer to current BNF and trust pharmacy intranet site.**

Elderly

If there is a sudden onset of disturbed behaviour in an elderly patient, a diagnosis of an acute organic brain syndrome is a possibility. If possible identify the underlying cause of this and treat it. Small doses of antipsychotics e.g. Haloperidol can be used for the disturbed behaviour. **For recommended dosages always refer to current BNF and trust pharmacy intranet site.**

Pregnancy

Refer to the medicine information pharmacist at Hull Royal Infirmary.

Appendix one

Mandatory training and equipment

Mandatory training in the use of rapid tranquillisation.

Ref-Royal College of Psychiatrists report 1998- Management of imminent violence guidelines.

Ref-The short term management of disturbed (Violent) behaviour in psychiatric inpatient settings- NICE guidelines April 2004.

- 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 failure of attempts to promote full participation in self care.
- Training in the use and the dangers of rapid tranquillisation is as essential as training for de-escalation and restraint. Doctors and nurses should be familiar with the properties and possible risks and side effects of benzodiazepine and anti psychotics.

Medical and nursing staff from the identified areas in the trust that use parenteral rapid tranquillisation will:

- Be able to assess the risks associated with rapid tranquillisation, particularly when the patient is highly aroused and may have been misusing drugs, be dehydrated or possibly be physically ill.
- Understand the cardio- respiratory effects of the acute administration, where appropriate, of these drugs and the need to titrate dosage to effect.
- Recognise the importance of nursing, in the recovery position, patients who have received these drugs and also monitoring of pulse, blood pressure and respiration.
- Be familiar with and trained in the use of resuscitation equipment, this is essential as an anaesthetist or experienced crash team may not be available on site.
- Be familiar with the Trust procedure used in a medical emergency.
- Be trained in the use of pulse oximeters.
- Undertake annual training in resuscitation techniques.
- Understand the importance of maintaining an unobstructed airway.
- Use and administration of Flumazenil.

The Trust has an approved policy for rapid tranquillisation within the psychiatric intensive care unit. As part of the policy, there is a formal requirement for all staff involved in the use and practice of rapid tranquillisation to be trained and competent in its application. The policy clearly states that this is a planned clinical intervention. Any decision to introduce the regime of rapid tranquillisation needs careful consideration by the multi- disciplinary team and the formulation of a care plan allowing for appropriate care, treatment and observation levels to be maintained.

All qualified registered mental health nurses working in areas who may be required to administer rapid tranquillisation must include as part of their mandatory training:

- Immediate life support, including the use of oxygen, suction, defibrillation and anaphylaxis.
- Care group specific training in violence and aggression

- Safe and secure handling of medicines training
- Demonstrate competence in the use of pulse oximeters.(Training given via immediate life support training).
- Awareness and familiarity with the trust policy on rapid tranquillisation.

Refresher training covering all the above areas should be undertaken every twelve months.

Currently the psychiatric intensive care unit P.I.C.U. is utilising this policy, other trust in-patient services are working towards this.

All medical staff based on the P.I.C.U. must include as part of their mandatory training :

- Awareness and familiarisation of the trusts policy on rapid tranquillisation.
- Familiarisation of the trusts policy on the management of violence and aggression.
- Minimum of level one training in the management of violence and aggression (de-escalation and breakaway techniques).
- Knowledge in regards to medication management to include indications for the use of rapid tranquillisation, drugs recommended for use in rapid tranquillisation, the need to titrate dosage to effect, risks associated with rapid tranquillisation and the use and administration of Flumazenil.
- Immediate life support training, including the use of oxygen, suction, defibrillation and anaphylaxis.

Refresher training covering all the above areas should be undertaken every twelve months.

Currently all new doctors who join the Trust will undertake as part of their induction training an awareness session on rapid tranquillisation and familiarise themselves with the trust policy.

A full training session on rapid tranquillisation and immediate life support will occur on a six monthly basis as part of the junior doctor's training timetable. It is an expectation that all doctors who may be required to use rapid tranquillisation will attend this training session in order to update skills and meet mandatory training requirements.

Recommended list of equipment:

Access to Automated External defibrillator or access to general hospital “crash team”

Disposable adult bag and valve mask

Resuscitation pocket masks (10)

Non breathing mask (appropriate to patient group)

Oropharangeal Airways (various sizes appropriate to patient group)

Suction equipment (manual or electric)

Oxygen cylinder with multi flow pin index regulator

Emergency drug box

Tourniquet

Disposable thermometer

Sphygmomanometer

Stethoscope

Pulse oximeter

The above equipment to be audited on a monthly basis by the unit manager.

Appendix Two

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