Dementia and Specialist Older Adults Mental Health Community Mental Health Teams (CMHT’s)

Non-Medical Prescribing (NMP) Protocol

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1: Overview:
This Lincolnshire Partnership NHS Foundation Trust (LPFT) prescribing protocol is based on the holistic treatment within dementia and older adult mental health services which focuses on optimising physical and psychological health and social functioning. This approach includes emphasis on ensuring community prescribing by the older adults community mental health teams (OA-CMHT), does not take place in isolation, but is a component of a broader treatment package. This approach aims to promote optimal health outcomes within dementia and all types of mental illness, from a holistic approach and aims to consider all alternative options prior to the prescribing of medication.

2: The purpose of this document:
This protocol provides guidance for all non-medical prescribers who work within OA-CMHT’s under the clinical supervision of a medical lead (Consultant in Psychiatry). This protocol enables all OA-CMHT prescribers to formulate prescribing interventions consistent with best practice and LPFT’s Non-Medical Prescribing (NMP) policy.

3: Objectives of non-medical prescribing (NMP) within OA-CMHT:

- To reduce waiting times which in turn will reduce risk for service users in the community, who are waiting consultant psychiatrist appointments.

- To prescribe in urgent situations, where it would be more beneficial and timely for a non-medical prescriber to deliver the intervention.

- To work with those service user who are assessed to be appropriate for intervention from a non-medical prescriber as opposed to a psychiatrist (e.g. dispersed diagnosis associated treatment for non-complex dementia, non-complex MH needs)

- To provide all treatment associated monitoring for service users under the care of a non-medical prescriber; to include all physical health care monitoring, including appropriate referrals and communications as a consequence of this monitoring.

- To reduce side-effects of medications through holistic care assessment and carry out medication reviews.

- To work within own competency and recognise limitations and make appropriate referral to medical prescriber when deemed necessary.

- To work with general practitioners and consultant psychiatrists for the purposes of effective care delivery.

- To engage in collaborative care with service users as part of their treatment package. To improve overall medication concordance.

- Health promotion

- To enable service users to exit from the OA-CMHT back to the care of their general practitioner.
4: Basic principles and core practice of therapeutic prescribing:

The following is a list of principles and practice of prescribing for non-medical prescribers working for the OA-CMHT's. Any deviation from these principles or modes of practice should first be sanctioned by the medical lead, who may keep the chief pharmacist informed of such matters.

- All NMP staff must also ensure that they maintain their professional registration and any associated stipulations or conditions of registration i.e. Continual Professional Development criteria.

- Service Managers Are responsible for ensuring that, they and all managed NMP staff are aware of and operate within the NMP policy.

- NMP staff will work within the duties described within this document and the Medicines Management Policy

- OA-CMHT NMP’s should recognise their prescribing and other professional limitations and act to ensure they are not working outside of these limitations. They should discuss any concerns on such matters with their clinical supervisor.

- OA-CMHT NMP’s must be satisfied that a comprehensive assessment, risk assessment and a well-being plan have been completed and are in date before any new prescription is started. The comprehensive assessment must include all physical, psychological, and social problems and needs. Only if a comprehensive assessment indicates that the expected benefits of a prescribing outweigh its potential risks, will a prescription be issued.

- Before every new prescription is issued, the prescriber should be satisfied that each service user, or appropriate proxy/carer, is aware of the importance of monitoring medication and overall mental health to ensure effective and safe delivery of care.

- OA-CMHT NMP’s should verify all service users and/or proxy/carer who are accessing prescribing services have been advised on safe storage arrangements for their prescription and risks to others, especially children, of having access to their prescribed medication.

- OA-CMHT NMP’s should verify, where applicable, that service users and/or proxy/carers are informed about any driving regulations and if they should contact the Driving and Vehicle Licensing Agency (DVLA).

- Accurate, contemporaneous records must be kept of all prescriptions, including date issued, dates to start, drugs prescribed, and dosage.

- Green FP10 prescriptions should be used only when necessary, with prescribing via the general practitioners by way of fax as the principle route. In the event that an FP10 prescription is issued the non-medical prescriber must ensure that they keep a record of all prescriptions issued and the serial numbers. These should be kept and stored in a safe place in accordance with Trust policy.

- Liaison between community pharmacies and OA-CMHT is fundamental for effective and safe treatment, as the pharmacist is usually the health care professional who has most regular (potentially daily) contact with a service user. Prescribers should discuss all pharmacy issues with pharmacist and service users and/or proxy/carer.

- See ‘Review Process’ for timing and frequency of reviews by medical and non-medical prescribers.
5: Referral for NMP interventions:

In some cases, due to the diverse and complex nature of the service users referred to the OA-CMHT, it is important that the service can be adaptable in order to adequately meet the needs of service users. The access to non-medical prescribers within the OA-CMHT’s will help facilitate a more flexible service user centred approach, focusing not purely on prescribing but also on holistic health management and reducing risk and waiting times. Each prescribing intervention must be based upon a face-to-face assessment by the non-medical prescriber, which will enable a collaborative plan of care to be designed. In order for a service user to be eligible for non-medical prescribing interventions they must meet the following criteria:

- The service user must have an open referral to the OA-CMHT.
- The service user, and/or proxy/carer, must be willing to engage with follow up care, if a pharmacological treatment is initiated.
- The service user must not present with complex comorbidities, such as complex physical health issues, which may suggest that their needs would be met more appropriately by referral to a Consultant psychiatrist.
- The service user must have an up to date risk assessment and well-being plan in place prior to commencement of non-medical prescribing activity.
- The referrer must provide the non-medical prescriber with an up to date list of all physical and mental health medication.

6: Restrictions to OA-CMHT non-medical prescribing:

As per section 3.3.1. of LPFT NMP Policy (OPR 40) all independent and supplementary NMP’s must only agree/have a professional responsibility and accountability, to prescribe medication or products they are satisfied fall within their area of clinical competence and experience, and within the remit of their job description/role profile and the service within which they are employed.

OA-CMHT prescribing for all independent and supplementary NMP’s is only supported within/is restricted to: Section 4 (Central Nervous System) of the British National Formulary (BNF) sub-sections (all up to BNF limits for elderly):

- 4.1.1 Hypnotics* (*excluding Promethazine hydrochloride, sodium oxybate, melatonin, chloral hydrate)
- 4.1.2 Anxiolytics (excluding Meprobamate)
- 4.2.1 Antipsychotic drugs* (*excluding Clozapine, Levomepromazine, Zuclopenthixol acetate & Lurasidone hydrochloride)
- 4.3.1 Tricyclic and related anti-depressant drugs (excluding Dosulepin hydrochloride & Mianserin hydrochloride)
- 4.3.3 Selective serotonin re-uptake inhibitors
- 4.3.4 Other antidepressant drugs* (*excluding Agomelatine, Reboxetine & Flupenthixol: only to be initiated by medical staff).
- 4.9.2 Antimuscarinic drugs used in parkinsonism* (*excluding Trihexyphenidyl hydrochloride)
- 4.11 Drugs for dementia

- Oral routes of administration only (with exception of Rivatigmine transdermal patch)
- Conditions and needs related to:
  - non-complex mental health needs in the elderly
  - non-complex dementia associated needs of any age.
Further restrictions placed on the extent of their independent prescribing practice as agreed with their medical supervisor. This is particularly likely for newly qualified non-medical prescribers, and those who have cumulated little prescribing experience. The extent of clinical prescribing practice for each individual non-medical prescriber must be agreed within clinical supervision with the medical lead/supervisor, and explicitly recorded within the supervision notes.

The parameters for prescribing are then agreed with the Head of Service who keeps a record of these parameters within the OA-CMHT approved prescribers file; this information is also sent to the Trust’s chief pharmacist.

7: Formulary of prescribing by non-medical prescribers:

NMP is restricted to section 4 of the BNF (Central Nervous System – see section 6 above for details): prescribing practice must be supported/guided by the guidance within current BNF editions for this section (4). Additional guidance relating to local protocols and practice relevant to OA-CMHT within the demarcated sphere of prescribing practice are provided in the Appendices of this protocol. These cover:

Prescribing related to:

- Behavioural and psychological symptoms of dementia (BPSD) – Appendix 1
- Delirium – Appendix 2
- Rapid tranquillisation for frail adults (including patients with dementia and learning disability) – Appendix 4
- Dementia drugs – Appendix 6

Further guidance on good prescribing practice is available within LPFT’s Medicines Management & Clinical Devices policy.

8: Clinical pathway from medical prescribing to non-medical prescribing:

This section relates to OA-CMHT NMP’s, who may be eligible to receive cases as a transfer from medical prescribers only if specified within the NMP’s job role.

Service users will be transferred when their presentations are consistent with clinical prescribing practice identified for their NMP. Transfer to a newly qualified NMP, and to those who have cumulated little prescribing experience, should only be considered for service users who are ‘stable’; as indicated by all of the following:–

- Regular attendance for appointments with the OA-CMHT and medical prescriber.
- No evidence of a pattern of problematic use of prescription drugs or illicit drugs
- No evidence of heavy or problematic drinking
- No current acute mental health disorder
- No severe or deteriorating physical problems that complicate drug treatment, to include pregnancy.
9: Clinical pathway from non-medical prescribing to medical prescribing:

The following presenting features should trigger a discussion between a NMP and a medical prescriber about a return of prescribing to the latter:

- Deteriorating physical health/complex physical co-morbidities
- Mental health/dementia related needs with complex/unstable co-morbid neurological conditions (e.g. epilepsy/seizures, Parkinson’s disease (PD’s), Huntington’s disease (HD) etc)
- Complex/treatment resistant mental health conditions requiring complex dual/adjunctive therapy; i.e. two classes of drugs from within the same drug group (e.g. antidepressants, antipsychotics etc.)
- Treatment resistant/refractory depression where a monoamine oxidase inhibitor (MAOI) is to be considered/indicated.
- Evidence of heavy or problematic use of other substances, including alcohol.
- Recurrent failure to engage with NMP and/or attend appointments
- When a possible increase of medication, which would exceed BNF limits, is indicated/required.
- Any other presenting feature that causes the NMP to feel concerned about lack of progress or level of risks.

It is not intended that service users repeatedly oscillate between non-medical and medical prescribers. Most discussions between a NMP and a medical prescriber (including the clinical lead) about ‘unstable’ service users will result in advice only, but some discussions will result in the medical prescriber providing a single assessment appointment, and in these situations, the service user remains prescribed by the NMP. When one or more of the above criteria is/are clearly met, and unlikely to resolve quickly, discussion between a NMP and a medical prescriber (including the clinical lead) may result in a transfer of the prescribing responsibilities to the medical prescriber. These service users will remain prescribed by a medical prescriber until their presentations are consistent with the criteria for being prescribed by a NMP; hence, there is no minimum or maximum time for service users to stay with a medical prescriber.

10: Review process:

OA-CMHT NMP’s should be care-coordinators for all service users to whom they prescribe.

Non-medical prescribers should routinely review the response and health status of all service users for whom they prescribe. A review appointment should occur no longer than between 2 and 4 weeks (medication dependent) following the initiation of a new medication. Routine monitoring, i.e. of established/stabilised medication, should take place at minimum every 12 weeks. However, in the event of an urgent appointment being required, all attempts will be made to facilitate this.

Failure to attend a clinic-based review with any NMP, will result in one further appointment being offered. If the service user fails to attend without informing the team, resulting in a DNA, a discussion with a medical prescriber regarding discharge back to the care of the general practitioner will take place.
11: Physical health care (PHC)and monitoring:

The NMP will take responsibility for ensuring the regular completion of appropriate required monitoring for specific and general medication monitoring and associated/indicated PHC needs.

These include:

- Reviewing results and liaising with medical staff to interpret findings. To make appropriate onwards referrals as required.
- Ensuring physical health checks are completed prior to drug initiation and on a regular basis as indicated by best-practice; such as BMI, blood work (e.g. FBC’s, U&E’s etc.) blood pressure, pulse etc.
- Take appropriate account within prescribing choices of existing PHC issues impacting drug response (e.g. hepatic and renal function)
- Making referral to other health care providers such as dietitians, SALT, smoking cessation etc. as required/indicated.

Specific PHC-monitoring requirements related to the treatment for the management of BPSD and/or delirium and for Rapid Tranquillisation for frail Adults are identified in the associated appendices below.

12: Adverse drug reactions (ADR’s):

The NMP has a duty to report any adverse drug reactions via the yellow card system (for reporting cards see inside cover of BNF) and also alert to consultant, GP and any other health care professional.

13: Black triangle drugs:

The NMP can prescribe black triangle drugs but this must be discussed with a consultant or medical prescriber especially if initiating the medication.

14: Prescribing above BNF limits and “off licence drugs”:

Any drugs prescribed over the BNF limits will only be prescribed within a Clinical management plan with the consultant psychiatrist maintaining overall responsibility.

Prescribing “off licence” will only be exercised with careful consideration and liaison with consultant psychiatrist. Clear rationale for the prescribing decision must be fully documented in the clinical record.

15: Supervision:

Non medical prescribers should have regular supervision from either a consultant psychiatrist or a senior, experienced NMP. Supervision sessions involve a 1 hour meeting and occur at a frequency of 4 to 6 weekly for NMP’s. The supervision record should contain:
- Topics raised in advance by supervisor
- Topics raised in advance by supervisee
- Topics discussed
- Outcome actions for supervisor
- Outcome actions for supervisee
- Date of next supervision

Once the content of the written record is agreed by supervisor and supervisee, it is signed by both.

17: References:

Management of Behaviour and Psychiatric Symptoms of Dementia (BPSD)

Interaction vs Environmental (I vs E)
A calm and sensitive approach is important
- Introduce yourself and regularly orientate patient
- Explain care plan, repeating information I
- Avoid arguments or over focusing on facts I
- Try and involve familiar people including family, friends and carers to help I
- Low stimulation and orientation aids E
- Place patient in a side room or quite bay E
- Avoid ward transfer E
- Consider special observations
- Use PAIN approach: manage:
  P = physical problems, e.g. infection, pain
  A = activity - related e.g. dressing, washing
  I = iatrogenic, e.g. side effects of drugs
  N = noise and environmental factors, e.g. lighting
- Consider 1 to 1 care

Use non-pharmacological and environmental approaches
- Reduce environmental stimuli
  - Distraction
  - 1 to 1 care
  - Aromatherapy
  - Carer involvement and support
- Leave and return
  - Activity
  - Music

Alzheimer’s Disease Dementia (ADD), Mixed Dementia (MD) or Vascular Dementia
Antipsychotics worsen cognition, increase risk of stroke and death. Risk increases with age, vascular risk factors and established cerebrovascular disease. Only use after full discussion with patient or carer. Start at lowest possible dose, increase every 2-4 days if no response. Once patient has responded, maintain for up to 6 weeks then withdraw by halving dose for one week and then stop if no symptoms. Review again at 7 days. If BPSD persist therefore continue to review. Treatment with antipsychotics may be required long-term but necessity should be reviewed by GP or mental health team. Regular medication should be reviewed every 12 weeks and PRN medication should be reviewed at least every 7 days.

First Line Intervention
Depression/apathy: watchful waiting/citalopram 10mg OD or mirtazapine 15mg OD or sertraline 50mg OD (2,3)
Psychosis/agression/severe agitation: risperidone 0.25mg BD (1)
Start low. Go slow.
No response. If watchful waiting and above intervention unsuccessful and evidence documented.

Second Line Treatment
Depression/apathy: trazodone 50mg OD
Psychosis/agression/severe agitation:
  1st line: haloperidol 0.5mg BD (1,3,4) or risperidone 0.25mg BD (1)
  2nd line: Alternative shake翟 antipsychotic and/or anti-cholinesterase inhibitor, or memantine 5mg OD.

If no response or concern about depression, REM sleep disorder, long term management of PDD or DLB or apathy, psychosis, aggression, agitation in ADD or MD, seek advice from physician with interest in elderly care or Parkinson’s disease or liaison or catchment area psychiatrist or neurologist.

If above fails, or immediate and serious risk to patient / others, follow Rapid Tranquilisation Pathway page 5.

Appendix 1a: BPSD pathway:

Assess cause of challenging behaviour

History & Investigations
Abbreviated Mental Test (AMT) < 8/10
Confusion Assessment Method (CAM) p.4

Delirium present

Delirium absent

Delirium Care Pathway page 3

Behaviour & Psychiatric Symptoms of Dementia (BPSD)

Use medication ONLY if
- Psychosis
- Depression
- Severe behaviour posing significant risk to patient or others

Identify main symptoms
- Psychosis
- Depression
- Apathy
- Aggression
- Agitation/fatigue
- Sleep disturbance
- Wandering

Could this patient have Dementia with Lewy Bodies (DLB) or Parkinson’s Disease Dementia (PDD)? Refer to key features from East Midlands BPSD guidelines?

Yes - refer all carers for specialist advice

Patients with DLB or PDD are very sensitive to antipsychotics and are likely to develop severe extra-pyramidal side effects.

First line medication
Psychosis/agression/severe agitation

PDD: consider reduction of anti-Parkinson’s Rx. If clinical indication of to continue or no response, consider quetiapine 25mg BD(3)

DLB: lorazepam 0.5mg bd or quetiapine 25mg bd

Monitor and review

No response

Falls risk

Commence Falls Pathway

If no response or concern about depression, REM sleep disorder, long term management of PDD or DLB or apathy, psychosis, aggression, agitation in ADD or MD, seek advice from physician with interest in elderly care or Parkinson’s disease or liaison or catchment area psychiatrist or neurologist.

If above fails, or immediate and serious risk to patient / others, follow Rapid Tranquilisation Pathway page 5.
Appendix 1b: General Guidelines for Management of BPSD and Delirium

Environmental Considerations

• Ward
  • Clocks, wipe boards with date, location, season & current weather recorded are in patient’s immediate environment
  • Photographs rather than symbols are used to identify toilets, bathrooms etc
  • Maximise natural lighting, but reduce excessively bright lights
  • Pictures of staff who work on the ward
  • Avoid inter and intra ward transfer

• Personalisation of patient
  • Spectacles & hearing aids are present and working
  • Laminated photographs of people familiar to patient available
  • Patient wears own clothes
  • “All about me” document completed by carers or nursing staff

Ensure Clinical Team Have:

• Used appropriate de-escalation techniques
• Treated pain adequately (avoid tramadol)
• Treated underlying infection or metabolic disturbance
• Treated constipation
• Ensured patient is adequately hydrated and nourished
• Stopped unnecessary drugs which can cause or worsen confusion eg anticholinergics, benzodiazepines (especially pre-operatively), opiates
• Avoided irritants such as urinary catheters and cannulas

IF PHARMACOLOGICAL TREATMENT IS INDICATED

Ensure

• Non-drug approaches continue to be used
• Patient has not been using alcohol or opiates
• Explanation given to patient or carer as to why medication is necessary. Document rationale and discussion in notes
• Always use minimum effective dose of medication and do not exceed BNF limits

EVIDENCE LEVELS

1) Meta-analysis
2) Randomised Controlled Trials
3) 3 or more other studies
4) expert opinion
Appendix 2: ULHT/LPFT delirium pathway

Delirium care pathway for frail adults (including patients with dementia and learning disability)

Complete abbreviated mental test on patients >65 if AMT ≤ 8 (in Acute Admission Proforma)

Confusion Assessment Method (CAM)*
Record score in clinical notes
1. Acute onset or fluctuating course
2. Inattention
3. Disorganised thinking
4. Altered consciousness: Lethargic, Hyperalert, Stuporous, Comatose
Record CAM in clinical notes

CAM positive

Assess risk of delirium
1. NEWS score > 4
2. Urea / Creatinine ratio > 72
3. MMSE < 24
4. SNELLEN < 6/18
If no to assessments 1 and 2, risk of delirium low and 3 and 4 unnecessary.

Critical illness
Pre-existing dementia
Delirium ± Dementia
Probable dementia

Assess and manage factors causing or exacerbating illness

Pre-existing dementia or AMT ≤ 8/10
Critical illness e.g.
- dehydration
- kidney injury or renal impairment
- fracture neck of femur
- other surgery

Frailty syndrome e.g.
- weakness
- malnutrition
- poor mobility
- depression

Sensory impairment
- visual
- hearing

Pharmacological
- taking 4 or more drugs regularly
- more than 3 drugs added in last 24 hours
Other
- catheterisation
- restraint
- infection


A calm and sensitive approach is important

Interaction:
- Introduce yourself and regularly orientate patient
- Explain and repeat key information
- Avoid arguments
- Involve carers and give out delirium leaflet

Environment
- Low stimulation/orientation aids
- Use side room / quiet bay
- Avoid ward transfers and moving within ward
- Personalisation - own clothes, lighting
- Consider special observations

Increase oral Haloperidol or Lorazepam by 0.5mg increments every 2 days (up to a maximum of 1.5mg BD for Haloperidol and 1mg BD for Lorazepam). USE FOR ONE WEEK OR LESS AND REVIEW AT REGULAR INTERVALS.

No response, investigation / treatment necessary, or risk to patient or others.

Partial response

Oral Haloperidol 0.5mg BD or Lorazepam 0.5mg BD for PDD or DLB. Assess response within 2 hours and at regular intervals thereafter. USE FOR ONE WEEK OR LESS.

If oral medication is refused, serious risk or urgent need for investigation and treatment: Haloperidol 1mg IM and/or either Lorazepam 0.5mg IM or Midazolam 2.5mg SC. For PDD/DLB: Lorazepam 0.5mg IM or Midazolam 2.5mg SC.

Observation level: Assess response within 2 hours & at regular intervals thereafter; Consider combination of Lorazepam and Haloperidol.

If patient responds consider regular oral medication as in box above. USE SHORT TERM FOR ONE WEEK OR LESS

If no response contact consultant or seek specialist help.

 behaviour and psychiatric symptoms of dementia pathway.

Page 1
### Appendix 3: Confusion Assessment Method (CAM) assessment:

**Confusion Assessment Method* (CAM)**
(Inouye et al 1990)

<table>
<thead>
<tr>
<th>Features</th>
<th>Tick all that apply</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Confusion</strong></td>
<td></td>
</tr>
<tr>
<td>This feature is usually obtained from a carer and is shown by positive responses to the following questions:</td>
<td></td>
</tr>
<tr>
<td>· Is there evidence of an acute change in mental state from the patient's baseline?</td>
<td></td>
</tr>
<tr>
<td>· Does the (abnormal) behavior fluctuate during the day, that is, tend to come and go or increase and decrease in severity?</td>
<td></td>
</tr>
<tr>
<td><strong>2. Inattention</strong></td>
<td></td>
</tr>
<tr>
<td>This feature is shown by a positive response to the following question:</td>
<td></td>
</tr>
<tr>
<td>· Does the patient have difficulty focusing attention, for example being easily distractible, or having difficulty keeping track of what was being said?</td>
<td></td>
</tr>
<tr>
<td>(inattention can be detected by asking for the days of the week to be recited backwards)</td>
<td></td>
</tr>
<tr>
<td><strong>3. Disorganised thinking</strong></td>
<td></td>
</tr>
<tr>
<td>This feature is shown by a positive response to the following question:</td>
<td></td>
</tr>
<tr>
<td>Was the patient's thinking disorganized or incoherent such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?</td>
<td></td>
</tr>
<tr>
<td><strong>4. Altered consciousness</strong></td>
<td></td>
</tr>
<tr>
<td>This feature is shown by any answer other than alert to the following question.</td>
<td></td>
</tr>
<tr>
<td>Overall, how would you rate this patient’s level of consciousness?</td>
<td></td>
</tr>
<tr>
<td>a. Alert (normal)</td>
<td></td>
</tr>
<tr>
<td>b. Lethargic</td>
<td></td>
</tr>
<tr>
<td>c. Vigilant</td>
<td></td>
</tr>
<tr>
<td>d. Stuporose</td>
<td></td>
</tr>
<tr>
<td>e. Comatose</td>
<td></td>
</tr>
</tbody>
</table>

The diagnosis of delirium by the CAM requires the presence of features 1 and 2 and either 3 or one of categories 4 b-e
Appendix 4a: Rapid Tranquillisation Protocol for Frail Adults (including patients with dementia and learning disability)

**USE RAPID TRANQUILLISATION PROTOCOL ONLY IF:**
- Immediate and serious risk of harm to patient or others
- Delirium excluded
- Behaviour and Psychiatric Symptoms of Dementia Pathway followed
- Use oral medication if at all possible at the lowest possible dose.
- Any psychotropic medication should be for short-term use only and should be reviewed
- Continue to use non-pharmacological measures described in BPSD Clinical Pathway

<table>
<thead>
<tr>
<th>First Line Treatment: Oral Medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloperidol 0.5mg BD</td>
</tr>
<tr>
<td>Do not use haloperidol if PDD or DLB suspected.</td>
</tr>
<tr>
<td>Use quetiapine 25mg bd instead</td>
</tr>
</tbody>
</table>

**Assess response within 2 hours**

**Second Line Treatment:**
**Intramuscular injection**
- Use one agent where possible
  - Haloperidol 1mg im 4 hourly
  - Arpiprazole 5.25 9.75mg im stat dose
- Lorazepam 0.5mg im 4 hourly (up to 2mg daily by any route: dilute with 1ml sodium chloride 0.9% or water before administration)

**Assess response within 2 hours**

**Unsuccessful or oral medication refused and an emergency**

**Second Line Treatment:**
**Intramuscular Injection**
- Lorazepam 0.5mg (up to 2mg daily; dilute with 1ml sodium chloride 0.9% or water before administration)

**Assess response within 2 hours**

**Third Line Treatment:**
**Intramuscular Injection**
- Haloperidol 1mg

**Assess response within 2 hours**

**Plan for the 24 hours after successful rapid tranquillisation**
- Place on step-up chart
- Advise responsible clinical team as soon as appropriate
- Only if indicated start, restart or increase dose of regular antipsychotic
- Review any “when required” medication
- Complete rapid tranquillisation report

**Psychotic Symptoms**

**yes**

**no**

**First Line Treatment: Oral medication**
- Lorazepam 0.5mg 4 hourly (max 2mg daily)
- Allow 30-60 minutes to assess clinical effect

**Assess response within 2 hours**

**Seek specialist advice as soon as possible**

**Use RAPID TRANQUILLISATION PROTOCOL ONLY IF:**
- It is tailored to the individual.
- The indication for the PRN medication is documented.
- There is clarity of target symptoms
- There is clarity of therapeutic response
- There is likely timescales to response to medication
- Prescribed as a maximum total daily dose, i.e. regularly prescribed, administered and PRN.
- The number and reason for missed doses.
- Emergence of unwanted side-effects is monitored.
- Medication is reviewed at least weekly.
Appendix 4b: Observations after rapid tranquillisation:

Monitor:
- Alertness
- Respiratory rate
- Pulse
- Blood pressure
- Temperature
- SpO2

1. If a patient is unconscious continuous pulse oximetry is recommended
2. For all patients undertake observations
   - Every 5-10 minutes for first hour after rapid tranquillisation
   - Then every 30 minutes until patient is ambulatory
   - Then continue to monitor alertness, mental state and behaviour
   - Restart physical observations if there are any concerns.

Record:
- All observations on chart
- Fluid balance

Investigations:
- Kidney Function and electrolytes should be monitored as clinically indicated
- ECG monitoring is recommended if parenteral antipsychotics have been given in high doses
Appendix 5: Guidelines about specific medications:

**Antipsychotics:**
- The evidence base for treating psychosis is poor:
- Parkinsons Disease Dementia (PDD) or suspected Dementia with Lewy Bodies (DLB): use with caution. Do not use haloperidol or olanzapine
  - Use with caution if antipsychotic naïve or ischaemic heart disease
  - Monitor for extrapyramidal side effects; consider anticholinergics if dystonic reactions develop but remember these drugs may increase confusion
  - Monitor for deteriorating cognitive function
  - Risperidone is the only antipsychotic to have a licenced indication for BPSD but is associated with an increased risk of stroke
  - Chlorpromazine: not recommended
  - Haloperidol
    - Monitor closely for extrapyramidal side effects. For acute dystonias, ensure procyclidine available (oral 2.5mg tds; parenteral 2.5-5mg)

**Cholinesterase Inhibitors:** (Donepezil, Galantamine and Rivastigmine)
- Check ECG to ensure QTc interval <450ms
- These drugs are not licenced for the treatment of BPSD in vascular dementia, stroke related dementia or other dementias and there is little evidence base or efficacy in these conditions. Specialist advice should be sought rather than starting cholinesterase inhibitors for these conditions.

**Antidepressants:**
- The use of antidepressants and hypnotics for BPSD has little evidence base and should follow existing guidelines for the management of these drugs in older patients without dementia. Treatment should follow BNF guidelines.
- Beware that citalopram and sertraline may worsen symptoms of Parkinson’s Disease.

**Benzodiazepines:**
- Diazepam is not recommended due to long half-life; lorazepam is recommended instead
- Facilities for resuscitation and emergency medication must be available if benzodiazepines used for rapid tranquillisation
- Never mix haloperidol and lorazepam in the same syringe
- Ensure i/v flumazenil available if respiratory rate <10/minute
References:


Inouye, S.K. et al., 1999 “A multicomponent intervention to prevent delirium in hospitalized older patients”. NEJM, 340, 669-676


NICE. Clinical Guideline 103 July 2010, Delirium: Diagnosis, Prevention and Management


Acknowledgements:

These guidelines have been prepared with reference to the following Clinical Guidelines:

- Isle of Wight Healthcare NHS Trust: clinical guideline for the care and treatment of older people with delirium in a general hospital setting May 2003
- Lincolnshire Partnership NHS Foundation Trust Rapid Tranquillisation Policy December 2009

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Appendix 6: Dementia Drugs

For further information with regards the prescription and management of Dementia Drugs please also refer to the LCCG/LPFT Shared Care Guideline: Donepezil, galantamine, rivastigmine and memantine for the treatment of Alzheimer’s disease. Sixth edition (2015). Also the NICE Technology Appraisal Guidance 217.

6.1: Recommended Dosage and Administration

**Donepezil**

Initially 5mg once daily at bedtime increased if necessary at one month to 10mg daily. Maximum daily dose is 10mg.

The 5mg daily dose should be maintained for at least one month to allow for the earliest clinical response to treatment to be assessed and to allow for the steadystate concentrations of donepezil to be achieved.

**Galantamine**:

*Galantamine tablets and oral solution*

Initially 4mg twice daily (preferably with morning and evening meals) for four weeks increasing then to 8mg twice daily. The initial maintenance dose is 8mg twice daily (16mg a day) and patients should be maintained on this dose for at least four weeks. An increase to a maintenance dose of 12mg twice daily (24 mg a day) should be considered after appropriate assessment including evaluation of clinical benefit and tolerability. In patients not showing an increased response to this dose, a reduction back to 8mg twice daily should be considered.

*Galantamine modified release capsules (Reminyl XL):*

Initially 8mg daily (preferably with morning meals) for four weeks increasing then to 16mg daily. The initial maintenance dose is 16mg daily and patients should be maintained on this dose for at least four weeks. An increase to a maintenance dose of 24mg daily should be considered after appropriate assessment including evaluation of clinical benefit and tolerability. In patients not showing an increased response to this dose, a reduction back to 16mg a day should be considered.

Galantamine doses will need to be reduced in patients with moderately impaired hepatic function.

**Rivastigmine**:

Initially 1.5mg twice daily, with morning and evening meals, increased in steps of 1.5mg twice daily at intervals of at least 2 weeks according to response and tolerance. Usual dose range 3 -6mg twice daily. Maximum dose 6mg twice daily.

The capsules should be swallowed whole. Rivastigmine oral solution and capsules may be interchanged at equal doses.

If treatment is interrupted for more than several days it should be re-initiated at 1.5mg twice daily and dose titration carried out as described above.

**Transdermal**

Treatment should be initiated with the 4.6mg/24hr patch. After a minimum of four weeks and if well tolerated the dose should be increased to the 9.5mg/24hour patch, which is the recommended effective dose. Maintenance treatment should be temporarily interrupted if gastrointestinal adverse effects are observed until these adverse effects resolve. Transdermal treatment can be resumed at the same dose if treatment is not interrupted for more than several days, otherwise treatment should be re-initiated with 4.6mg/24hr patches.

**Switching**: Patients on oral doses of not more than 6mg/day can be switched to
4.6mg/24hr patches. Those on 9mg/day in whom the dose has not been stable or well tolerated can be switched to the 4.6mg/24hr patch. Those on an oral dose of 9mg/day in whom the dose is well tolerated, or those on 12mg/day can be switched to the 9.5mg/24hr patch. After a minimum of four weeks of treatment with the 4.6mg/24hr patch, if well tolerated, the dose should be increased to the 9.5mg/24hr patch which is the recommended effective dose. It is recommended to apply the first transdermal patch on the day after the last oral dose.

Memantine:
Initially 5mg daily increased in steps of 5mg at weekly intervals to a maximum daily dose of 20mg.

6.2: Background Pharmacology:

Donepezil, galantamine and rivastigmine are all reversible inhibitors of acetylcholinesterase and galantamine also has nicotinic receptor agonist properties. Neurochemical studies in Alzheimer’s disease has shown a wide spread loss of several neurotransmitters associated within the cerebral cortex and hippocampus. Studies have shown that the cognitive impairment that is associated with Alzheimer’s disease is due to a disorder affecting cholinergic neurones. Whilst the widespread nature of the neurotransmitters deficits suggests it is difficult to devise a replacement therapy, studies have shown that increasing acetylcholine function may benefit cognitive function in some patients.

Memantine is a glutamate receptor antagonist which can prevent the pathological stimulation of NMDA receptors.

The glutamatergic neurotransmitter system plays a crucial role in memory formation and information processing. Disturbances in the system contribute to the manifestations of the symptoms of Alzheimer’s disease. Memantine blocks the effect of excessive glutamate thus restoring physiological signal transmission.

6.3: Adverse Effects

Donepezil:
Most commonly: nausea, vomiting, anorexia, diarrhoea, fatigue, insomnia, headache, dizziness, syncope, hallucinations, agitation, aggressive behaviour, muscle cramps, urinary incontinence, susceptibility to the common cold, rash and pruritis.
Less frequently: bradycardia, convulsions, gastric and duodenal ulcers and gastrointestinal haemorrhage.

Rarely: sino-atrial block, AV block, liver dysfunction including hepatitis and potential for bladder outflow obstruction.

Galantamine:
Most commonly: nausea, vomiting, diarrhoea, abdominal pain, dyspepsia, syncope, rhinitis, susceptibility to urinary tract infections, sleep disturbance, dizziness, confusion, depression, headache, fatigue, malaise, tremor, asthenia, fever, anorexia and weight loss.

Less frequently: arrhythmias, palpitations, myocardial infarction, myocardial ischaemia, cerebrovascular disease, transient ischaemic attacks, paraesthesia, tinnitus and leg cramps.

Rarely: bradycardia, seizures, hallucinations, agitation, aggression, dehydration, hypokalaemia, and rash.
Very rarely: gastrointestinal bleeding, dysphagia, hypotension, AV block, sweating and exacerbation of Parkinson’s disease.

Rivastigmine:

Adverse effects may occur particularly when initiating therapy or increasing the dose. Most commonly: nausea, vomiting, diarrhoea, dyspepsia, anorexia, abdominal pain, dizziness, headache, fatigue, drowsiness, tremor, asthenia, malaise, agitation, confusion, sweating and weight loss.

Less frequently: syncope, depression and insomnia

Rarely: gastric or duodenal ulceration, rashes, angina pectoris and seizures

Very rarely: gastrointestinal haemorrhage, pancreatitis, elevated liver function tests, cardiac arrhythmias, bradycardia, hypertension, hallucinations, extrapyramidal symptoms (including worsening of Parkinson’s disease).

Memantine:

Common: adverse effects are constipation, hypertension, dyspnoea, headache, dizziness and drowsiness.

Less commonly: vomiting, thrombosis, heart failure, confusion, fatigue, hallucinations and abnormal gait.

Very rarely: seizures, pancreatitis, psychosis, depression and suicidal ideation.

6.4: Drug Interactions:

All anticholinesterase inhibitors will act additively with other anticholinesterase and cholinergic drugs and oppose the actions of anticholinergic drugs.

Donepezil:

Muscle Relaxants - possibly enhances the effects of suxamethonium and possibly antagonises effects of non-depolarising muscle relaxants.

Galantamine:

May cause bradycardia and therefore may enhance effects of other medication that reduce the heart rate including digoxin and beta blockers.

Muscle relaxants - enhances the effects of suxamethonium.

Paroxetine increases bioavailability of galantamine by about 40% because it inhibits CYP2D6 increasing risk of galantamine side effects particularly nausea and vomiting. Manufacturers advise a dose reduction of galantamine if this should occur. There is also a potential for similar interactions with other CYP2D6 inhibitors such as fluoxetine, fluvoxamine and quinidine.

Ketoconazole & erythromycin increase plasma concentration of galantamine due to CYP3A4 inhibition. Manufacturers warn of potential similar interactions with other CYP3A4 inhibitors such as ritonavir.

Rivastigmine:

Muscle relaxants - enhances the effects of suxamethonium and antagonises effects of non-depolarising muscle relaxants.

Should not be used with other cholinomimetic drugs such as tacrine because of possible additive effects.
As an anticholinesterase it is expected to oppose the activity of anticholinergic drugs.

Memantine:
General anaesthetics - memantine increases risk of CNS toxicity.
Ketamine – avoid concomitant use.
Analgesics – increased risk of CNS toxicity, manufacturer advises avoid concomitant use with dextromethorphan.

Dopaminergics. Memantine enhances the effect of dopaminergics and selegiline. There is also increased risk of CNS toxicity if used with amantadine.
The BNF also advises caution if prescribed with the following:
Warfarin – memantine possibly enhances its anticoagulant effect
Antiepileptic - memantine possibly reduces the effect of primidone.
Antimuscarinics – memantine possibly enhances the effect.
Antipsychotics – memantine possibly reduces the effect.
Barbiturates - reduces the effects.
Muscle relaxants – possibly modifies the effect of baclofen and dantrolene.

6.5: Precautions

Donepezil:
Sick sinus syndrome and other supraventricular conduction abnormalities, susceptibility to peptic ulcers including those on concurrent NSAIDs, asthma, chronic obstructive pulmonary disease, hepatic impairment, may exacerbate extrapyramidal symptoms, history of seizures.

Galantamine:
Cardiac disease (including sick sinus syndrome or other supraventricular conduction abnormalities, unstable angina, congestive heart failure), electrolyte disturbances, susceptibility to peptic ulcers, asthma, chronic obstructive pulmonary disease, pulmonary infection, hepatic impairment, pregnancy, avoid in urinary retention, gastro-intestinal obstruction and those recovering from gastrointestinal or bladder surgery, may worsen Parkinsonian symptoms.

Rivastigmine:
Gastric or duodenal ulcers (or susceptibility to ulcers), monitor body-weight, sick sinus syndrome, conduction abnormalities, history of asthma or chronic obstructive pulmonary disease, history of seizures, bladder outflow obstruction, hepatic impairment avoid if severe, renal impairment, pregnancy, may worsen Parkinsonian symptoms.

Memantine:
Should be used with caution if history of convulsions.

6.5: Contraindications
All - A known hypersensitivity to the named acetylcholinesterase inhibitor or any of the excipients used in the formulation.

Donepezil - Pregnancy and breast- feeding.

Galantamine - Severe hepatic and renal impairment; breast-feeding.

Rivastigmine - Breast-feeding, severe hepatic impairment.

Memantine - Severe hepatic impairment
6.6: Monitoring
Response to treatment needs to be periodically reviewed by assessing effectiveness on cognitive, global, functional or behavioural symptoms.

All assessments measuring response to treatment are the responsibility of the consultant/ specialist team.

Treatment will be monitored on a needs led basis by the older adult CMHT. It is the responsibility of the specialist services to advice regarding discontinuation of medication.

Details are provided on page 9 of this protocol of the contact details of the specialist teams and the approximate geographical areas that they cover. It is also recommended that the view of the carers is sought prior to the patient commencing treatment and at each follow-up review with the specialist.
# Appendix 7: Clinical management plan for Supplementary prescribing within the OA-CMHT

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