Working in partnership

SHARED CARE PRESCRIBING GUIDELINE

ARIPIPRAZOLE AND PALIPERIDONE LONG ACTING INJECTION (LAI)

NOTES to the GP

The expectation is that these guidelines should provide sufficient information to enable GPs to be confident to take clinical and legal responsibility for prescribing this drug.

The questions below will help you confirm this:

- Is the patient's condition predictable or stable?
- Do you have the relevant knowledge, skills and access to equipment to allow you to monitor treatment as indicated in this shared care prescribing guideline?
- Have you been provided with relevant clinical details including monitoring data?

If you can answer YES to all these questions (after reading this shared care guideline), then it is appropriate for you to accept prescribing responsibility.

If the answer is NO to any of these questions, you should not accept prescribing responsibility. You should write to the consultant within 14 days, outlining your reasons for NOT prescribing. If you do not have the confidence to prescribe, we suggest you discuss this with the appropriate Milton Keynes Hospital specialist service, who will be willing to provide training and support.

It would not normally be expected that a GP would decline to share prescribing on the basis of cost.

The patient's best interests are always paramount

Date prepared: January 2017	**Review date:** February 2019
Approved by Milton Keynes Prescribing Advisory Group	**Date approved:** February 2017

Introduction and reason for shared care

Long acting atypical antipsychotics (aripiprazole and paliperidone) are used for the treatment of schizophrenia treatment and preventing recurrence of mania. These preparations may have an advantage over oral preparations in maintenance treatment, most likely because of guaranteed medication delivery.

The reason for shared care is to ensure that the care of patients prescribed an Atypical Long Acting Antipsychotic medication is shared safely and effectively between primary and secondary care

ARIPIPRAZOLE AND PALIPERIDONE LONG ACTING INJECTION (LAI)

1. CIRCUMSTANCES WHEN SHARED CARE IS APPROPRIATE

- Prescribing responsibility will only be transferred when the consultant and the GP are in agreement that the patient's condition is stable or predictable.
- Patients will only be referred to the GP once the GP has agreed in each individual case and the hospital will continue to provide prescriptions until successful transfer of responsibilities as outlined below.

2. AREAS OF RESPONSIBILITY

Consultant / Mental Health Team Prescribing Responsibilities

- Confirm diagnosis
- Inform patient of treatment options and risks and benefits of aripiprazole or paliperidone LAI including adverse effects.
- Obtain consent, and ensure provision of verbal and written information on disease and treatment to patient and/or carer
- Ensure the CNWL 'Atypical Antipsychotic LAI Initiation Assessment' has been completed and approved by CNWL pharmacy prior to initiating an atypical depot.
- Undertake and review baseline tests and ensure that baseline or "on-treatment" laboratory test results are communicated to the GP, as numerical values.
- Ensure awareness of concurrently prescribed medicines and consider potential medication interactions; liaise with GP if review/alteration of other medicines is necessary.
- Initiate prescribing and continue to prescribe and administer medication until the treatment is stable and GP agrees to share care. This will be at least three months after the maintenance dose of the antipsychotic LAI has been achieved.
- Monitor efficacy, changes in symptoms and behaviour, compliance, evaluate adverse effects (including emergence of movement disorders) and advise GP on discontinuation of treatment where necessary.
- Discuss with the patient the plan to share care with their GP
- Send the request form to the GP to request shared care.
- Provide GP with diagnosis.
- Provide the GP with dose, formulation and frequency.
- Inform the patient of the outcome of the request for shared care; whether the GP has accepted prescribing responsibility and explain the transfer process (the need for an initial appointment with the GP to be made within 3 weeks in order to obtain the first shared care dose of treatment).
- Ensure that prescription and administration of aripiprazole or paliperidone LAI is covered for at least 4 weeks after the GP has agreed share care.
- Be available in a timely manner to discuss or give backup advice regarding treatment in the event of abnormal laboratory test results or change in mental/physical condition.
- Inform the GP if any appointments are not attended.
- Consultant team to review the patient at least annually if still under the care of the Trust. Request a copy of monitoring results from GP prior to yearly review.

GP • Receive request for shared care form from consultant, consider clinical details and own competency against protocol. • Reply to consultant requesting shared care (in writing) within 14 days. • To continue prescribing once the dose of medication is stable. • Monitor patient's overall health and wellbeing. • Report any significant adverse effects to the Mental Health Team. • Encourage patient's ongoing engagement with Mental Health Services • Consider the effect of potential medication interactions and liaise with Mental Health Consultant if review/ alteration of other medicines is necessary. • Liaise with Mental Health Services if concerned with patient condition (mental state or side effects) or compliance (with medication or monitoring) or dose changes. • Undertake ongoing monitoring as outlined in this document and overall physical health at least annually. Focus on physical health problems that are common in people with mental health conditions including cardiovascular disease, diabetes, obesity and respiratory disease. A copy of the monitoring results should be sent to the care co-ordinator and consultant psychiatrist to form part of the patient's secondary care notes. • It is essential to communicate with secondary care if there are any significant concerns regarding changes in the patient's mental, physical health or reported laboratory tests. • Prior to administering first injection under shared care, the prescriber should endeavour to see the patient. If this is not possible, only one injection must be administered before the patient is seen.–To inform the consultant team of any relevant changes in other medication or clinical status, if treatment is ineffective or if concerned with patients condition.
Patient To attend all appointments with GP Surgery and Mental Health Specialists • Report to the specialist or GP if he or she does not have a clear understanding of the treatment • Discuss experience of treatment with the specialist or GP • Report any adverse effects to the specialist or GP • Share any concerns in relation to treatment with antipsychotics • Notify the specialist or GP of any medication changes (over the counter, alternative or prescribed) so prescriber can check for interactions. • Talk to specialist or GP as soon as possible if she is planning pregnancy or if she might be pregnant.

3. COMMUNICATION AND SUPPORT

Hospital contacts: (the referral letter will indicate named consultant) **CNWL Mental Health services contacts:** (the referral letter will indicate named consultant) **CNWL Milton Keynes Headquarters** **Milton Keynes Hospital** **Standing Way** **Eaglestone** **Milton Keynes** **Bucks** **MK6 5NG** **01908 243933**	**Out of hours contacts & procedures:** Back-up advice and support On-call psychiatrist accessed via MKUH switchboard 01908 660033
Specialist support/resources available to GP including patient information:	

- NICE CG178 – psychosis and schizophrenia in adults: prevention and management, Updated March 2014: https://www.nice.org.uk/guidance/cg178
- NICE CG185 – Bipolar disorder: assessment and management , Updated February 2016: https://www.nice.org.uk/guidance/cg185
- NICE CE90– Depression in adults: Recognition and management Updated April 2016: https://www.nice.org.uk/guidance/cg90
- Current BNF https://www.medicinescomplete.com/mc/bnf/current/
- Manufacturer's Summary of Product Characteristics (SPC) https://www.medicine.org.uk/emc/
- CNWL Medicines Information Service (Tel: 020 8206 7271 or by email medinfo.cnwl@nhs.cnwl@nhs.net Mon-Fri) or your mental health pharmacist at your local mental health service
- CCG pharmacy team
- CNWL Choice and Medication Website: http://www.choiceandmedication.org/cnwl/class/7/
- CNWL Guidelines for the use of Antipsychotics in people with Schizophrenia & FEP 2015 http://trustnet.cnwl.nhs.uk/Documents/Guidelines_for_the_Use_of_Antipsychotics_in_People_with_Schizophrenia_First_Episode_Psychosis.pdf
- CNWL Summary of Physical Health Monitoring with Mood Stabilisers and Antipsychotics: http://trustnet.cnwl.nhs.uk/Documents/Physical_Health_Monitoring_with_Mood_Stabilisers_Antipsychotics Booklet.pdf#search=Summary%20of%20Physical%20Health%20Monitoring%20with%20Mood%20Stabilisers%20and%20Antipsychotics

4. CLINICAL INFORMATION

Indication(s):	**Aripiprazole:** Schizophrenia treatment and preventing recurrence of mania **Paliperidone:** Maintenance therapy in schizophrenia in patients (prior response to paliperidone or risperidone)		
Place in Therapy:	• For people with psychosis or mania who have expressed a preference for LAI treatment or if non-adherence to oral medication is problematic. • When typical depot antipsychotic medication is not appropriate or tolerated, and in patients who have a documented response to oral risperidone or aripiprazole respectively.		
Therapeutic summary:	Aripiprazole and paliperidone LAIs are second generation antipsychotics and have a relatively lower propensity for Extra Pyramidal Side effects (EPS). They are rapidly released and effective within a few days. Paliperidone LAI is indicated for maintenance treatment of schizophrenia in adult patients stabilised with paliperidone or risperidone. Aripiprazole LAI is indicated for maintenance treatment of schizophrenia in adult patients stabilised with oral aripiprazole.		
Dose & route of administration:	Both LAI are administered once a month by intra muscular injection in the deltoid or gluteal muscles. **Apriprazole LAI**: The recommended maintenance dose of 400 mg. If there are adverse reactions with the 400 mg dosage, reduction of the dose to 300 mg once monthly should be considered **Paliperidone LAI:** The recommended monthly maintenance dose is 75 mg; some patients may benefit from lower or higher doses within the recommended range of 25 to 150 mg based on individual patient tolerability and/or efficacy.		
Duration of treatment:	Ongoing		
Preparations available (Manufacturer)	**Apriprazole LAI:** Abilify Maintena 300mg & 400mg powder and solvent for prolonged-release suspension for injection and suspension for injection in pre filled syringe, Otsuka Pharmaceuticals (UK) Ltd **Paliperidone LAI:** Xeplion 25 mg, 50 mg, 75 mg, 100 mg, and 150 mg prolonged-release suspension for injection, Janssen-Cilag Ltd		
Summary of adverse effect	**Aripiprazole Frequency**	**Paliperidone Frequency**	**Management of adverse effects**
Insomnia	≥1- <10%	≥10%	This should diminish within a few weeks. Timing of dose may be altered
Anxiety, agitation	≥1- <10%	≥1- <10%	This should diminish within a few weeks. Relaxation techniques may be of benefit. It may be appropriate to consider an alternative antipsychotic if this remains a significant problem- refer back to secondary care.
Somnolence	≥1- <10%	≥1- <10%	Counsel patient not to drive or operate machinery. Try altering dose to night to minimise this effect
Dizziness	≥1- <10%	≥1- <10%	Often related to postural hypotension. Carry out lying and standing BP. Advise patient not to stand up too quickly and to avoid driving if feeling dizzy
Headache	≥1- <10%	≥10%	Advise on analgesia
Nausea, vomiting	≥0.1%- <1%	≥1- <10%	These should settle. Advise patient that taking the dose with or after food may help

Dry mouth	≥1- <10%	≥0.1%- <1%	Chewing sugar-free gum or boiled sweets can help, or artificial saliva mouth sprays
Constipation	≥0.1%- <1%	≥1- <10%	Encourage a high fibre diet, drinking at least 2 litres of fluid and mild exercise may help to minimise. Mild laxatives may also be of benefit.
Blurred vision	≥0.1%- <1%	≥1- <10%	This is usually dose-dependent; therefore a lower treatment dose may be tried. Advise optician appointment.
Tachycardia	≥0.1%- <1%	≥1- <10%	Monitor pulse. This is usually dose dependent. Therefore a lower treatment dose may be tried
BP changes	≥0.1%- <1% Orthostatic hypotension	≥1- <10% hypertension ≥0.1%- <1% Orthostatic hypotension	Monitor BP lying and standing. This is usually dose dependent. Therefore a lower treatment dose may be tried
Extrapyramidal symptoms (EPS): Acute dystonia, tremor, rigidity, stiffness, hypokinesia, akathisia, hypersalivation, dysarthia	≥1- <10% Extrapyramidal disorder, Akathisia Dystonia, Parkinsonism, Hypersalivation	≥1- <10% Parkinsonism, Dystonia, Tremor, Dyskinesia, Akathisia ≥0.1%- <1% Tardive dyskinesia	These symptoms are generally mild at optimal dosages and partially reversible without discontinuation upon administration of anti-muscarinic medication.
Dyspnoea	Not listed in SPC	≥0.1%- <1%	Assess for potential causes and treat if none identified refer back to Mental Health Services if problematic.
Hyperprolactinaemia (may result in: galactorrhoea, gynaecomastia, disturbances of the menstrual cycle and amenorrhoea)	≥0.1%- <1%	≥1- <10%	This is usually dose dependent; a lower treatment dose may be tried, or an alternative antipsychotic. Refer back to Mental Health Services if problematic.
Sexual dysfunction e.g. erectile dysfunction. Decreased libido	≥1- <10%	≥0.1%- <1%	≥1- <10% Erectile dysfunction ≥0.1%- <1% Decreased libido It may be appropriate to consider an alternative antipsychotic if this remains a significant problem- refer back to Mental Health Services.
Weight gain	≥1- <10%	≥1- <10%	Advise on exercise and diet
Elevated lipids	Not listed on SPC	≥0.1%- <1%	Assess relevance and treat according to NICE CG181
Elevated blood glucose	≥0.1%- <1%	≥1- <10%	Assess relevance and treat according to NICE CG66

Blood changes (please see SPC for details of specific blood disorders)	≥0.1%- <1% Neutropenia Thrombocytopenia	≥0.1%- <1% Anaemia ↓haematocrit ↓WBC count ↑eosinophils ≥0.01%- <0.1% Agranulocytosis Neutropenia Thrombocytopenia	Patients on antipsychotics should be offered the flu vaccine. Where repeat infections observed, FBC to be assessed and frequency tests increased. Discontinue if significant changes and refer back to Mental Health Services if problematic.
LFT changes	≥0.1%- <1%	≥1- <10% Rises in transaminases ≥0.1%- <1% Rises in GGT	Increase frequency of LFTs. Discontinue if significant changes and refer back to Mental Health Services.
Site of injection	≥1- <10% Pain Induration	≥1- <10% Injection site reaction	Consider local anaesthetic cream prior to injection. Rotate site of injection
Other Rare Issues	**Adverse effect**	**Importance**	**Management**
	Neuroleptic Malignant Syndrome:	Potentially serious or fatal if 'full blown'. Asymptomatic rises in plasma creatine kinase (CK) are fairly common.	**Refer to Emergency Services** Muscular rigidity and sympathetic hyperactivity. Signs and symptoms may include fever, rigidity, diaphoresis, confusion, fluctuating consciousness, fluctuating blood pressure, tachycardia, elevated creatinine kinase, altered LFTS.

Monitoring requirements Based on NICE guidance for Psychosis & Schizophrenia CG178	**By specialist: Baseline tests** Specialist to request summary of tests from GP before annual review	**By GP** **These frequencies are guides; such parameters may need to be monitored more frequently and dictated by individual risk factors such as concurrent medical co-morbidities, polypharmacy or it there are other current clinical concerns (e.g. patients with pre-existing diabetes, or those with abnormal results from routine monitoring) In these situations, frequency will be specified by the prescriber and documented in the patient's care plan.**
Glucose Fasting	✓ **and at 12 weeks**	**At 1 year, then annually**
HbA_{1C}	✓ **and at 12 weeks**	**At 1 year and then annually**
Lipids Fasting (random if not possible)	✓ **and at 12 weeks**	**At 1 year and then annually**
FBC	✓	**Annual check-up**
LFT	✓	**Annual check-up**
U&Es Including eGFR	✓	**At 6 months then annually**
Creatine Phosphokinase (CPK)	✓	**If Neuroleptic malignant syndrome suspected (refer to "Adverse effects and Management")**
Prolactin	✓	**Annual check-up** **Not required for aripiprazole at doses within BNF limits unless symptoms occur**

ECG	Recommended if: *Physical examination shows specific cardiovascular risk *Personal history of cardiovascular disease *Patient admitted as inpatient	**Best practice to offer Annual check-up especially where other risk factors exist**
BP & Pulse	✓ **and at 12 weeks**	**At 1 year and then annually[1]**
Weight and BMI (plotted on graph where available)	✓ **Weekly for the first 6 weeks and at 12 weeks**	**At 1 year then annually[1] ,**
Waist Circumference (plotted on graph where available)	✓	**Annual check-up[1]**
Assessment of any movement disorders	✓	**At each contact**
Assessment of nutritional status, diet and level of physical activity	✓	**At each contact**

Clinically relevant drug interactions:	Refer to BNF
Clinically relevant Precautions and Contraindications:	**Contra-indications:** CNS depression; comatose state; phaeochromocytoma **Cautions** as for all antipsychotic drugs: Blood dyscrasias; cardiovascular disease; conditions predisposing to seizures; depression; epilepsy; history of jaundice; myasthenia gravis; Parkinson's disease (may be exacerbated) (in adults); photosensitisation (may occur with higher dosages); prostatic hypertrophy (in adults); severe respiratory disease; susceptibility to angle-closure glaucoma
Practical issues:	All preparations to be stored at room temperature. Reconstitute injections according to manufacturer's recommendations
Missed Doses:	**Paliperidone & Aripiprazole:** if missed dose is > 4 weeks and < 6 weeks, administer as soon as possible and then resume monthly injection schedule. If > than 6 weeks refer to Mental Health Services for further advice
Key references:	See the BNF and the summary of products characteristics (www.medicines.org.uk) for the most up to date information on licensed indications, cautions, contra-indications, side effects and drug interactions.
Original Author(s):	Keval Modi, Lead Pharmacist, Central and North West London NHS Foundation Trust, June 2016
Review Author(s):	Fahreen Hasham, Lead Pharmacist, Central and North West London NHS Foundation Trust, January 2017

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Shared Care Guideline: Prescribing Agreement
(Note: Sections A and B MUST be forwarded to GP and returned by GP back to the hospital together)

Section A: To be completed by the hospital consultant initiating the treatment

GP Practice Details:	**Patient Details:**
Name: ……	Name: ……
Address: ……	Address: ……
Tel no: ……	DOB: ……/……/……
Fax no: ……	Hospital number: ……
NHS.net e-mail: ……	NHS number (10 digits): ……

Consultant name: ……
Clinic name: ……
Contact details:
Address: .....
Tel no: …… Fax no: ……
NHS.net e-mail: ……

Diagnosis:	**Drug name & dose to be prescribed by GP:**
……	……

Next hospital appointment: ……/……/……..

Dear Dr. ……..,
Your patient was seen on …../…../……and I have started ……(insert drug name and dose) for the above diagnosis. I am requesting your agreement to sharing the care of this patient from …../…../…….. in accordance with the (attached) Shared Care Prescribing Guideline (approval date: …./…./……..).
Assuming you accept the invitation to share care, the last dose to be administered by specialist services will be on …/…./…….
Anticipated first dose to be given in primary care will be …../……/……

Please take particular note of Section 2 where the areas of responsibilities for the consultant, GP and patient for this shared care arrangement are detailed.

Patient information has been given outlining potential aims and side effects of this treatment and ……* supplied *(* insert any support materials issued such as patient held monitoring book etc where applicable).* The patient has given me consent to treatment possibly under a shared care prescribing agreement (with your agreement) and has agreed to comply with instructions and follow up requirements.

The following investigations have been performed on ……/……/…… and are acceptable for shared care.

***See below for further details and monitoring schedule**

Other relevant information: ……..
……..

Consultant Signature: ……Date: …/…/…..

Section B: To be completed by the GP and returned to the hospital consultant as detailed in Section A above

Please sign and return your agreement to shared care within 14 days of receiving this request
Tick which applies:
□ I accept sharing care as per shared care prescribing guideline and above instructions
□ I would like further information. Please contact me on:…….
□ I am not willing to undertake shared care for this patient for the following reason:
……

GP name: ……

GP signature: ……Date: …/…/…..

(Note: Sections A and B MUST be forwarded to GP and returned by GP back to the hospital together)

Physical Health Monitoring Schedule for Aripiprazole and Paliperidone LAIs

Tests	Baseline monitoring To be done by Mental health team	Ongoing Monitoring To be done by GP once shared care is agreed	Date of most recent tests by MH Services	Results Attached (Y/N)	Recommendation for GP if different to minimum and why
Glucose Fasting	✓ **And at 12 weeks**	**At 1 year, then annually[1]**			
HbA_{1C}	✓ **And at 12 weeks**	**At 1 year and then annually[1]**			
Lipids Fasting (random if not possible)	✓ **And at 12 weeks**				
FBC	✓	**Annual check-up[2]**			
LFT	✓	**Annual check-up[2]**			
U&Es Including eGFR	✓	**At 6 months then annually[2]**			
Creatine Phosphokinase (CPK)	✓	**If Neuroleptic malignant syndrome suspected (refer to "Adverse effects and Management")**			
Prolactin	✓	**Annual check-up[2] Not required for aripiprazole at doses within BNF limits unless symptoms occur**			
ECG	Recommended if: *Physical examination shows specific cardiovascular risk *Personal history of cardiovascular disease *Patient admitted as inpatient	**Best practice to offer Annual check-up especially where other risk factors exist[2]**			
BP & Pulse	✓ **And at 12 weeks**	**At 1 year and then annually[1]**			
Weight and BMI (plotted on graph where available)	✓ **Weekly for first 6 weeks and at 12 weeks**	**At 1 year then annually[1]**			
Waist Circumference (plotted on graph where available)	✓	**Annual check-up[1]**			

Assessment of any movement disorders	✓	**At each contact**			
Assessment of nutritional status, diet and level of physical activity	✓	**At each contact**			
These frequencies are guides; such parameters may need to be monitored more frequently and dictated by individual risk factors such as concurrent medical co-morbidities, polypharmacy or it there are other current clinical concerns (e.g. patients with pre-existing diabetes, or those with abnormal results from routine monitoring) In these situations, frequency will be specified by the prescriber and documented in the patient's care plan.					