

## **Berkshire Healthcare NHS Foundation Trust (BHFT) and NHS Berkshire East and West Clinical Commissioning Groups**

### **Prescribing Arrangements for Patients Prescribed Long Acting Injectable (LAI) Antipsychotics**

At the time of diagnosis, clinicians in specialist mental health services in BHFT will give patients and carers written information about the comprehensive management of their condition. They will be advised that more useful information about mental health conditions and medication choices can be found at the BHFT "choice and medication" website:

[www.choiceandmedication.org.uk/berkshirehealthcare](http://www.choiceandmedication.org.uk/berkshirehealthcare)

Or can be accessed via the Berkshire Healthcare NHS Foundation Trust internet site at

[www.berkshirehealthcare.nhs.uk](http://www.berkshirehealthcare.nhs.uk)

(Click on "Medicines")

BHFT's Medicines Information Service, Prospect Park Hospital - Tel: 0118 960 5075

Email: [medicines.information@berkshire.nhs.uk](mailto:medicines.information@berkshire.nhs.uk)

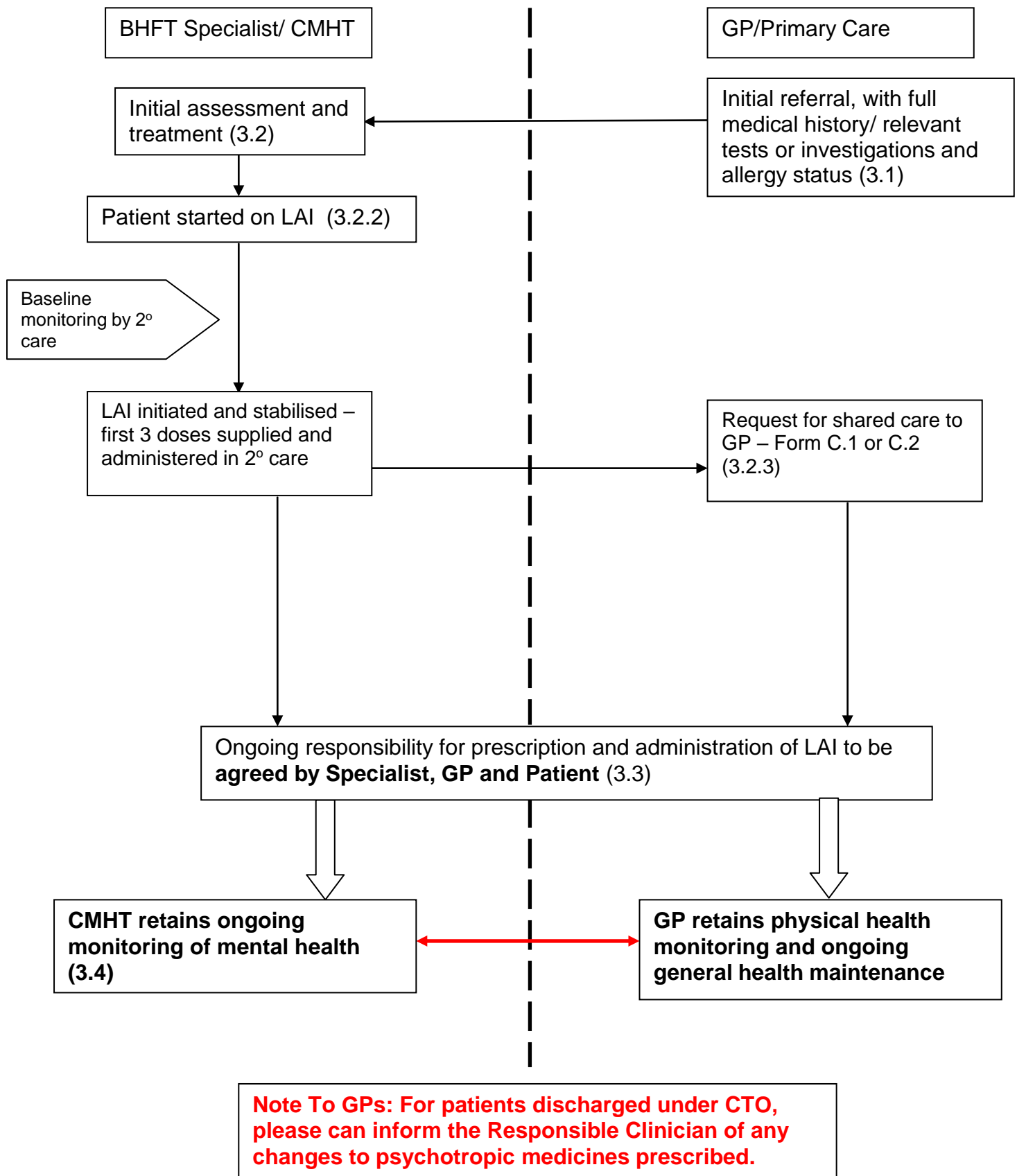
#### **CMHT contact details:**

To discuss a patient or to request specialist advice, GPs can call their local CMHT using the following numbers:

<b>Slough:</b> Adult CMHT Tel: Older Adult CMHT Tel:	01753 690950 01753 634671	<b>Reading:</b> Adult CMHT Tel: Older Adult CMHT:	0118 960 5612 0118 960 5040
<b>Bracknell:</b> Adult CMHT Tel: Older Adult CMHT Tel:	01344 823333 01344 823220	<b>Wokingham:</b> Adult CMHT Tel: Older Adult CMHT:	0118 989 0707 0118 989 0707
<b>Windsor &amp; Maidenhead:</b> Adult CMHT Tel: Older Adult CMHT:	01628 640200 01628 640350	<b>Newbury:</b> Adult CMHT Tel: Older Adult CMHT:	01635 292020 01635 292070
<b>Common Point of Entry: 0300 365 0300</b>			

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Review Date	July 2017 (or sooner, if there are relevant changes to national guidance)

## Management of patients treated with Long Acting Injectable Antipsychotics



## 1. Introduction

This prescribing arrangement applies to the following preparations, which are Formulary choices in BHFT:

Generic Name	Cost/ month (range from min to max dose ref: BNF 68)	Place in Formulary
<b>First Generation Antipsychotics (FGAs)</b>		<b>Amber status – in practice these are offered to all patients where a decision to use LAI antipsychotics has been made.</b>
Flupentixol decanoate (Depixol®, generics available)	£2.54 - £156.16	
Fluphenazine decanoate (Modecate®, generics available)	£1.30 - £17.50	
Haloperidol decanoate (Haldol®, generics available)	£3.81 - £15.15	
Zuclopenthixol decanoate (Clopixol®, generics available)	££3.15 - £42.36	
<b>Second Generation Antipsychotics (SGAs)</b>		<b>Amber status - considered where patients have not tolerated FGAs either orally or as LAI). These are more expensive than FGA LAIs.</b>
Paliperidone palmitate (Xeplion®)	£183.92-£392.59 per calendar month (12 injections pre year)	Approved for use in patients who have responded well to risperidone (orally or Consta®).
Risperidone (Risperdal Consta®)	£159.38 - £249.52	Approved for use in patients who have responded well to risperidone
Aripiprazole (Abilify Maintena®)	££220.41 per calendar month (12 injections pre year)	Approved for use in patients who have responded to and are stable on oral aripiprazole.

***All depot and LAI preparations will be referred to as ‘Long Acting Injectable’ antipsychotics or ‘LAIs’ for the purpose of these prescribing arrangements.***

LAIs form an important part of managing patients who have either expressed a preference for the associated convenience in dosing or through intentional or unintentional non-concordance with treatment, relapse and may be admitted to hospital frequently. Although the use of LAIs does not guarantee good treatment adherence, for those who continue with LAIs, there may be some adherence advantage over oral antipsychotics which is indicated by a longer time to treatment discontinuation<sup>9</sup>.

In terms of efficacy, there is no convincing evidence to support any advantage for SGAs over FGAs i.e. both are considered effective treatments. SGAs tend to have a lower propensity for extrapyramidal side effects and tardive dyskinesia, but this is offset by a higher propensity for metabolic side effects<sup>9</sup>.

## 2. Purpose

The main purpose of this Shared Care Guideline is to clarify the roles and responsibilities of both Secondary and Primary Care Clinicians in supporting both the initiation of treatment and maintenance, i.e., handover to GP care once a patient is stabilised.

### 2.1 Formulary status across Berkshire

LAIs in Berkshire have been given an 'amber' status i.e. they should only be initiated by specialist mental health services but can be continued in primary care under a shared care agreement. Due to differences in contractual agreements across East and West Berkshire, there are variations in level of responsibility taken for; prescribing, administration and monitoring between GPs, Consultant Psychiatrists and Community Mental Health Teams (CMHT).

#### BHFT/Non-Formulary:

- Olanzapine palmoate (ZypAdhera®) is non-formulary in BHFT so any Consultant wishing to consider initiation should submit a non-formulary application form and an appropriate care plan to [medicines.information@berkshire.nhs.uk](mailto:medicines.information@berkshire.nhs.uk) for prior approval.
- Pipotiazine palmitate (Piportil®) has been discontinued recently and so will also not be included in these arrangements.

### 2.2 Indications

There is established evidence for the use of antipsychotics in schizophrenia<sup>1</sup> as well as in bipolar conditions<sup>2</sup>. First and second generation LAIs are considered to equally effective<sup>8</sup>, however there is considerable variation in the adverse effect profiles respectively as mentioned earlier.

Together with other factors such as patient preference, response and compliance to treatment with oral antipsychotics, medical and drug history often determine the choice of LAIs.

According to NICE Guidelines for Schizophrenia<sup>4</sup>, LAI antipsychotics should be offered to patients:

- who would prefer such treatment after an acute episode
- where avoiding covert non-adherence (either intentional or unintentional) to antipsychotic medication is a clinical priority within the treatment plan.

Although most LAIs are not licensed for the treatment of bipolar<sup>7</sup> conditions, it is recognised practice to use LAI's where compliance is poor and benefits of the treatment outweighed by the risk of relapse and readmission to hospital. Patients with other longstanding psychotic illnesses such as schizoaffective disorders are also prescribed LAIs where the patient has expressed a choice or this has been considered appropriate. Although this is generally considered off-license use, BHFT have approved the use of antipsychotics for such indications as this is supported by NICE Guidelines<sup>6,10,11</sup>. This is detailed in an internal medicines related standard operational procedure which forms part of the BHFT Care and Control of Medicines Policy<sup>12</sup>.

## 2.3 Community Treatment Orders

LAIs can be administered under the more legal framework of a Community Treatment Order (CTO), which is in Section 17A of the Mental Health Act 2007. This part of The Act enables the Responsible Clinician (RC)(Consultant Psychiatrist) to place conditions of treatment on a patient on leave from hospital and allows for that patient to be recalled if treatment is refused. These patients will technically *not* be discharged from the care of their RC and CMHT until they can be discharged from the CTO. Prescribing and monitoring of LAIs for patients under CTO remains the responsibility of the BHFT RC.

The Responsible Clinician will prescribe medication for these patients on FP10 prescription pads and CMHT staff are responsible for administration. Routinely mental health monitoring is done by their RC/CC as per conditions set out in the CTO on a regular basis. *Physical health monitoring, in terms of relevant blood tests etc. and general health checks (e.g. diabetes, hypertension etc.) remain the responsibility of the GP.*

GP's should only prescribe medicines for such patients in agreement with the patients RC in order that they can ensure the rules under Section 58A of The Act are adhered to strictly. It is unlawful to administer medication not authorised on a Consent to Treatment Form (either CTO11 or CTO12) to a patient subject to a CTO. The RC is responsible for ensuring compliance with this and as such should authorise any psychotropic medication prescribing.

## 2.4 Community Mental Health Teams (CMHT)

Patients with severe and enduring mental illness tend to remain under the care of their local CMHT for their ongoing mental health assessments and review. Monitoring and maintaining physical health remains the responsibility of the GP and so regular exchange of information is essential between all concerned parties. Patients who are open to CMHT services are assigned an identified Care-Co-ordinator (CC), whose details will appear on discharge letters. However, there are exceptions to this where some patients may not require the services of a CC and others may be in the process of being allocated someone. Patients who are under the services of the Crisis Resolution Home Treatment Teams (CRHTTs) will not have a CC assigned to them.

If these patients experience difficulties, or do not present for appointments and cannot be located, then the CC should first be contacted. Where the patient does not have an identified CC, then Common Point of Entry (CPE) should be contacted – see front page for contact details.

Some patients who are stable and concordant with treatment are discharged back to the care of their GP, so are not under the care of CMHTs and will not have a CC. If these patients experience difficulties, then they can be referred back to BHFT via CPE.

**For patients who are registered with surgeries who have are not signed up to deliver Local Enhanced Services (LES), they should either be directed to register with another GP practice or BHFT Clinician retains prescribing of LAI (with PRIOR agreement from Locality Director)**

### 3. Responsibilities under shared care

#### 3.1 GP responsibilities

##### 3.1.1 Pre-referral to secondary care specialist service

1. To provide full history and details of presenting complaint including -
  - Past and present medical and psychiatric symptoms
  - Full physical assessment should include cardiovascular system examination, weight, blood pressure and heart rate.

If there is past medical or family history of serious cardiac disease, a history of sudden death in young family members or abnormal findings on previous cardiac examination, then provide ECG details with interpretation (consult a cardiologist for clarification as needed).

  - Risk assessment for substance misuse and drug diversion.
2. To provide a list of current medication, including formulation, dose and indications
3. To provide information about other co-morbidities

#### 3.2 Secondary Care Specialist Team's responsibilities:

##### 3.2.1 Initial Consultation/Assessment

1. Assess the patient, establish the diagnosis, determine a management strategy and devise a care plan.
2. Document in notes clearly; patient's concordance to medication and preferences with regards to treatment. Also document rationale for choice of treatment prescribed.
3. Check medical history and co-morbidities for cautions, contraindications to medications and interactions with current medicines (if any).
4. Check patients baseline blood tests (fasting lipids, blood glucose, LFT's, U&E's, FBC, prolactin) and other parameters like weight, BP and pulse.
5. Assess patient's cardiovascular risk factors and request ECG from GP (if not already provided – see section 3.1 above)
6. Offer oral or LAI treatment choices in line with BHFT Antipsychotic Guidelines and relevant NICE Clinical Guidelines, titrate to the minimum effective maintenance dose, monitor response and assess/manage initial side-effects (see appendix A for GASS tool).

##### 3.2.2 Where a decision has been made to initiate LAI

1. First generation LAIs require the administration of a test dose before a full dose can be administered. Refer to individual SPCs for method of administration/initiation via: [www.medicines.org.uk](http://www.medicines.org.uk) Second generation LAIs do not need test doses, but still require some dosage adjustment to stabilise the patient. It can take between 6-16 weeks to reach therapeutic, steady state plasma levels.
2. BHFT are conducting a formal evaluation of paliperidone LAI, for which additional forms



will need to be completed and sent to BHFT pharmacy department via medicines information e-mail address ([Medicines.Information@berkshire.nhs.uk](mailto:Medicines.Information@berkshire.nhs.uk)) at initiation and follow up after six months.

3. BHFT Psychiatrist should prescribe the first three doses of LAI antipsychotic and arrange for administration, by the appropriate secondary care specialist team until the patient is stable **before** requesting that the GP enters a shared care agreement.
4. The patient should be provided with written information and verbal information about the illness and treatments prescribed. Details of information provided must also be documented in the clinical notes. Patients can be referred to the BHFT Choice and Medication website as an independent reference source.  
<http://www.choiceandmedication.org/berkshirehealthcare/>
5. Reporting adverse events to the MHRA.
6. **The Specialist must send the GP a copy of this arrangement with the completed form (see Appendix C1 or C2) and a copy of the agreed care plan before handing over care.** Where a SGA LAI has been prescribed, it is important to include reasons for prescribing in particular, where more cost effective options were unsuitable. This should also include details of continual requirements for monitoring and review.

### 3.2.3 Following handover to GP (unless patient has been fully discharged):

1. Review progress if requested by GP – as indicated by change in behaviour; treatment resistance, increased sedation, etc. Notify the GP of the results of any patient reviews, including changes in prescribed dose. Ensure the patient has sufficient medication until the GP has received this information.
2. Receive and respond to feedback from GP as appropriate, e.g. progress/status of the patient and in particular noting any dose changes/alterations/discontinuation etc. of treatment under the agreement.
3. Ensure that arrangements of appropriate blood tests have been made. Specialist is responsible for the interpretation and monitoring of required blood test results for the first year of treatment (as per BHFT Antipsychotic Prescribing Guidelines).
4. To advise on dose adjustments and when it is appropriate to stop, and how to stop the depot.
5. Monitoring of patients on high dose anti-psychotics (i.e. more than 100% of the BNF maximum dose) would remain the responsibility of the Specialists as per BHFT High Dose Antipsychotic Policy.

### 3.2.3 GP Responsibilities (once shared care has been agreed)

1. To monitor at regular intervals the mental health, general health and well-being of the patient. Assess concordance, manage side-effects in liaison with the psychiatrist where necessary.
2. To ensure the patient has the necessary annual blood tests (fasting lipids, blood glucose, LFT's, U&E's, FBC, prolactin) in accordance with NICE Guidelines and inform Specialist of any abnormalities which may require

further review.

3. To notify the psychiatrist as soon as possible of any changes to drug treatment or change in presentation if appropriate. *If patients are being managed under a CTO, any changes to psychotropic medication prescribed must be reported to and be authorised by the Responsible Clinician.*
4. **For patients who have either been discharged from CMHT care or have their LAI administered by their GP Practice nurses;** regular non-attendance or missed appointments may indicate cause for concern. If a patient misses 2 appointments, then attempts should be made to contact the patient and ascertain reasons for non-attendance. ***If the patient cannot be reached or appears to be unwell, it is important to contact the Care Co-ordinator or call CPE for advice and possible referral (number is on front page of this arrangement).***
5. **Patients who are open to CMHT Services** will be followed up regularly (as detailed in individual care plans) to monitor mental health. CMHTs operate depot clinics where patients can come and have their LAI administered. In some cases where this is not practicable, Community Psychiatric Nurses will visit patients at home to administer their medication.
6. Follow specialist advice on any changes to treatment.
7. Report and seek advice from specialist on any aspect of patient care which is of concern (i.e. refer to endocrinologists and /or psychiatrists if prolactin is considerably raised).
8. To place the patient on the practice cases register for schizophrenia or serious mental illness and undertake annual reviews.

### 3.3 Monitoring Requirements

	BHFT Psychiatrists (CMHTs)				GP
	Baseline	1 month	3 months	6 months	12 Months- Ongoing
<b>Weight (include BMI ideally)</b>	✓	Monthly for the first year.			Annual
<b>Fasting lipids</b>	✓		✓		Annual
<b>Blood glucose (random/ fasting)</b>	✓		✓		Annual
<b>Liver Function</b>	✓				Annual
<b>ECG</b>	Baseline and after dose increases and then annually, especially for patients who are elderly, have cardiac risk factors, are taking other drugs known to prolong the QTc interval or are on high doses.				Annual (if indicated)
<b>U&amp;Es</b>	✓				Annual



<b>FBC</b>	✓		Annual
<b>Prolactin</b>	✓	Check if symptoms of hyperprolactinaemia occur (menstrual disturbance, galactorrhoea, gynaecomastia, sexual dysfunction)	Annual
<b>Blood pressure and pulse</b>	✓	Frequently during the titration of typical, risperidone and piperidone depots / LAI's.	Annual
<b>3.4 CPN Responsibilities</b>			
<ol style="list-style-type: none"> <li>1. Responsible for organising administration of LAI when patient is under the care of CMHT.</li> <li>2. Following up non-attendance to administration appointments.</li> <li>3. <b>Where CPNs are responsible for administering LAIs, they must send <u>written</u> confirmation of administration to the patient's GP regularly.</b></li> </ol>			
<b>3.5 Patient/carer responsibilities</b>			
<ol style="list-style-type: none"> <li>1. To attend appointments.</li> <li>2. To take the medication regularly and enter a concordant relationship with those involved in the delivery of their care.</li> <li>3. To inform the GP if new health problems occur.</li> <li>4. To ensure they have a clear understanding of their treatment.</li> <li>5. Share any concerns in relation to treatment with their GP and/or Consultant.</li> <li>6. Regularly monitor patients weight and report significant changes to GP and specialist.</li> </ol>			
<b>4. Duration of Treatment</b>			
<p>Following recovery from an acute episode of psychosis, the risk of relapse is high if antipsychotic medication is stopped within 1 to 2 years<sup>1</sup>. If a patient has expressed desire to stop their depot/LAI then they should be referred back to mental health services for advice and assessment. If the decision is to stop an antipsychotic, it should be done gradually and signs and symptoms of relapse monitored regularly (for at least 2 years after discontinuation)<sup>1</sup>.</p>			
<b>5. Management of Side Effects</b>			
<p>Refer to current BNF and individual SPCs (<a href="http://www.medicines.org.uk">www.medicines.org.uk</a>) for comprehensive list of side effects. Pain may occur at injection site and occasionally erythema, swelling and nodules. Depot antipsychotics generally do not produce acute movement disorders at the time of administration; this may take hours to days to develop. Antipsychotic use may be associated with an increased risk of venous thromboembolic events. Some of the known side effects of antipsychotics (e.g., sedation, weight gain) are known risk factors for VTE, and a direct or indirect causal association between antipsychotic use and VTE could not be excluded<sup>2</sup>.</p>			
<b>Signs and Symptoms</b>	<b>Action</b>		<b>By Whom</b>
Extra Pyramidal Symptoms (EPSE) such as parkinsonism, acute dystonic reaction, akathisia	If extra pyramidal side effects noted, anticholinergic drugs (e.g. procyclidine) may be considered however these		GP or Specialist

	<p>medicines can cause euphoria and cause anti-cholinergic side effects such as constipation.</p> <p>May Seek advice from consultant psychiatrist as EPSE are dose dependent for consideration for switching to preparation with low propensity for EPSE.</p>	
Akathisia i.e. restlessness	If appropriate, change to an atypical drug or reduce the antipsychotic dose.	Specialist
Tardive dyskinesia i.e. Lip smacking, tongue protrusion, choreiform hand movements, pelvic thrusting.	Stop anticholinergic if prescribed. A reduction in dose, discontinuation or change to an alternative if appropriate.	Specialist
Increased prolactin levels	<p>Confirm the root cause and liaise with endocrinologist.</p> <p>If it is anti-psychotic induced and symptomatic e.g. in women: amenorrhoea, menstrual disorders, galactorrhoea and reduced libido and in men: reduced libido, impotence &amp; gynaecomastia then refer the patient to BHFT psychiatrists. The longer the patient is exposed to hyperprolactinaemia, the greater the risk of reduced bone density and hypogonadism.</p>	<p>Specialist</p> <p>Treatment with calcium and vitamin D should be considered by the GP <i>if appropriate – in line with other Vitamin D guidance.</i></p>
Suspected neuroleptic malignant syndrome (NMS)- Signs and symptoms include: hyperthermia, fever, sweating, muscle rigidity, autonomic instability, altered consciousness, confusion, fluctuating blood pressure, tachycardia, raised creatine kinase	<p>Discontinue antipsychotic.</p> <p>Call for ambulance if symptoms are severe.</p>	GP or Specialist
Sedation	Dose reduction	Specialist
Weight gain	Encourage healthy balanced diet and regular exercise. Recommend annual follow-up by GP.	GP or BHFT Psychiatrists

Abnormal ECG / Cardiac disorders: QTc prolongation and arrhythmias	Non psychotropic medicines that can cause QTc prolongation include clarithromycin, and methadone.  Options would include switching to an antipsychotics with low propensity to cause QTc prolongation such as aripiprazole LAI or paliperidone LAI.	Specialist
Dry mouth	Suggest sugar-free gum, artificial saliva or occasional boiled sweets.	GP
Hypotension / dizziness	Advise patient to take time when getting up.	GP
Pain and swelling at injection site.	Alternate sites of injection. Review volume prescribed. Ensure correct injection technique	GP

## 6. Drug Interactions

Refer to current BNF and individual SPCs ([www.medicines.org.uk](http://www.medicines.org.uk)) for comprehensive list of interactions. Increased risk of ventricular arrhythmias when antipsychotics co-administered with other drugs known to significantly increase the QT interval. Combination to avoid includes citalopram and antipsychotics.

Use with caution drugs known to cause electrolyte disturbances such as thiazide diuretics (hypokalaemia) and as they may increase the risk of ventricular arrhythmias.

## 7. Individual LAI's

### 7.1 Aripiprazole Long-Acting Injection

It takes two weeks for the first injection to reach significant plasma levels, so oral antipsychotic cover (with aripiprazole) is required for two weeks after LAI initiation. It does not require refrigerated storage. The dose advised is 400mg per month and no titration is necessary. If the patient experiences adverse effects then the dose can be reduced to 300mg per month. Administration interval is each calendar month. Maintenance doses are administered into the gluteal muscle.

### 7.2 Paliperidone Long-Acting Injection

Paliperidone palmitate (Xeplion®) injection is given as a deep IM injection into the deltoid or gluteal muscle using the correct size needle provided in the pack. A loading-dose of 150mg is given into the deltoid on day 1 followed by a second loading dose of 100mg into the deltoid on day 8. This is followed by calendar month injections of 50-150mg into either the deltoid or gluteal

muscle. It is available as a ready-prepared pre-filled syringe that does not require cold storage.

*Note - paliperidone is the main active metabolite of risperidone. The main advantages of paliperidone over risperidone are:*

- injection does not require storage in refrigerators*
- Paliperidone can be administered once every calendar month rather than every two week and so can save nursing/appointment times*

### 7.3 Risperidone Long-Acting Injection

It must be stored in a refrigerator at between +2 to +8C and is only stable at room temperature for 7 days. The powder must be suspended in the diluent and administered using the correct size needle provided in the pack. Following an IM injection, the main release of risperidone starts from week 3 onwards, is maintained from weeks 4 to 6, and subsides by week 7.

### 7.4 Products Available

\*Please refer to the electronic Drug Tariff for the current and accurate FP10 price of these medicines. [http://www.ppa.org.uk/ppa/edt\\_intro.htm](http://www.ppa.org.uk/ppa/edt_intro.htm)

# Do not confuse the slow and long-acting zuclopenthixol decanoate (Clopixol®, Clopixol Conc®) depot with the faster, shorter-acting zuclopenthixol acetate (Clopixol Acuphase®) formulation. Errors have occurred when these products have been interchanged. The drug name and the packaging are very similar.

## **8. Administration of Injections**

Practitioners must have the necessary knowledge, skills and competency to safely administer depot antipsychotic injections by deep intramuscular injection using the “z-track technique”. Take particular care when selecting the needle gauge and length to ensure the drug is given into the muscle. For obese patients a longer 50mm green 21g needle should be selected for gluteal administration.

### **Prevention of local injection site reactions**

Use the lowest practical volume

Inject less frequently if possible to prevent hard plaques of tissue forming.

Use the Z-tracking technique to avoid extravasation

Use a needle of the right length for the patient to ensure deep intramuscular administration (longer needles are required for people with a higher body mass index (BMI))

Rotate injection sites to allow time to heal.

A very useful resource is Guidance on the Administration to Adults of Oil-based Depot and other Long-Acting Intramuscular Antipsychotic Injections (3rd Edition) available at <https://www.reach4resource.co.uk/sites/default/files/pdf6.pdf>

## **References**

1. NICE Clinical Guideline 178, Schizophrenia. March 2014
2. MHRA, Drug Safety Update, June 2009.  
<http://www.mhra.gov.uk/home/groups/pl-p/documents/publication/con049073.pdf>
3. BHFT Anti-psychotics Prescribing Guidelines.
4. BNF 68
5. [www.medicines.org.uk](http://www.medicines.org.uk)
6. NICE clinical guideline 185, Bipolar disorder: the assessment and management of bipolar disorder in adults, children and young people in primary and secondary care. September 2014
7. Bond D.J., Pratoomsri W., Yatham L.N. Depot antipsychotic medications in bipolar disorder: A review of the literature. vol./is. 116/SUPPL. 434(3-16), 0001-690X;1600-0447 (October 2007)
8. Shajahan P, Spence E, Taylor M, Daniel D, Pelosi A. Comparison of the effectiveness of depot antipsychotics in routine clinical practice. 10.1192/pb.bp.109.026849 (30 June 2010)
9. Maudsley Prescribing Guidelines, 12th edition. 2015.
10. NICE clinical guideline 178
11. NICE clinical guideline 90
12. BHFT Care and Control of Medicines Policy CCR006. Version 17, April 2015.

**Appendix A:**

**Glasgow Antipsychotic Side-effect Scale (GASS)**

**Name:** \_\_\_\_\_ **Age:** \_\_\_\_\_ **Sex: M / F**

**Please list current medication and total daily doses below:**

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This questionnaire is about how you have been recently. It is being used to determine if you are suffering from excessive side effects from your antipsychotic medication.

Please place a tick in the column which best indicates the degree to which you have experienced the following side effects. Tick the **end** box if you found that the side effect distressed you.

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<b>Over the <u>past week</u>:</b>	<i>Never</i>	<i>Once</i>	<i>A few times</i>	<i>Everyday</i>	<i>Tick this box if distressing</i>
1. I felt sleepy during the day					
2. I felt drugged or like a zombie					
3. I felt dizzy when I stood up and/or have fainted					
4. I have felt my heart beating irregularly or unusually fast					
5. My muscles have been tense or jerky					
6. My hands or arms have been shaky					
7. My legs have felt restless and/or I couldn't sit still					
8. I have been drooling					
9. My movements or walking have been slower than usual					
10. I have had, or people have noticed uncontrollable movements of my face or body					
11. My vision has been blurry					
12. My mouth has been dry					
13. I have had difficulty passing urine					
14. I have felt like I am going to be sick or have vomited					
15. I have wet the bed					
16. I have been very thirsty and/or passing urine frequently					
17. The areas around my nipples have been sore and swollen					
18. I have noticed fluid coming from my nipples					
19. I have had problems enjoying sex					
20. <u>Men only</u> : I have had problems getting an erection					

<b>Tick yes or no for the following questions about the <u>last three months</u></b>	<i>No</i>	<i>Yes</i>	<i>Tick this box if distressing</i>
21. <u>Women only</u> : I have noticed a change in my periods			
22. <u>Men and women</u> : I have been gaining weight			



### Staff Information

1. Allow the patient to fill in the questionnaire themselves. Questions 1-20 relate to the previous week and questions 21-22 to the last three months.

2. Scoring

For questions 1-20 award 1 point for the answer "once", 2 points for the answer "a few times" and 3 points for the answer "everyday".  
Please note zero points are awarded for an answer of "never".

For questions 21 and 22 award 3 points for a "yes" answer and 0 points for a "no".

Total for all questions=

3. For male and female patients a *total score* of:

0-21 = absent/mild side effects

22-42 = moderate side effects

43 and over = severe side effects

4. Side effects covered by questions

1-2 sedation and CNS side effects

3-4 cardiovascular side effects

5-10 extra-pyramidal side effects

11-13 anticholinergic side effects

14 gastro-intestinal side effects

15 genitourinary side effects

16 screening for diabetes mellitus

17-21 prolactinaemic side effects

22 weight gain

The column relating to the distress experienced with a particular side effect is not scored, but is intended to inform the clinician of the service user's views and condition.

## Appendix B

### Useful Resources

1. [Guidance on the Administration to Adults of Oil-based Depot and other Long-Acting Intramuscular Antipsychotic Injections](#)



Depot and LAIs.pdf

2. For detailed information about dose, adverse effects, cautions/ contraindications, please refer to the product Summary of Product Characteristics which can be accessed via: [www.medicines.org.uk](http://www.medicines.org.uk)
3. [LUNSERS rating scale](#)
4. [NICE Clinical Guideline 178, Schizophrenia. March 2014](#)
5. BHFT Anti-psychotics Prescribing Guidelines (Can be accessed via net formulary). <http://westberks.formulary.co.uk/default.asp>
6. BHFT Choice and Medication resource. Accessible via: [www.choiceandmedication.org.uk/berkshirehealthcare](http://www.choiceandmedication.org.uk/berkshirehealthcare)

**Further specialist advice can be sought if necessary from BHFT Medicines Information Service  
(For BHFT telephone: 0118 960 5075)**

**Appendix C.1**

<b>This form is a request for the General Practitioner to take over the prescribing &amp; administration of long-acting injectable antipsychotics (LAIs) under shared care arrangement</b>			
GP Name & Address			
<b>Patient's Name</b>		<b>Date of birth</b>	
<b>NHS number</b>			
<b>Name of medicine</b>		<b>Dose</b>	
<b>Frequency of administration</b>		<b>Last dose given</b>	
<b>Route</b>	Gluteal / Deltoid	<b>Side of last dose</b>	Right / Left
<b>Diagnosis and Rationale for Treatment</b> (including brief details of other agents tried and where applicable, adverse effects and any ongoing monitoring requirements)			
Please contact CMHT duty staff on _____ if the patient misses TWO successive appointments			
<b>Investigations done at baseline</b>	<b>Date Checked</b>	<b>Comments</b>	<b>Continued monitoring by GP</b>
Weight (include BMI ideally)			Three monthly
Fasting lipids			Annual
Blood glucose (random/ fasting)			Annual
Liver Function			Annual
ECG			Annual (if indicated)
U&Es			Annual
FBC			Annual
Prolactin			Annual
Blood pressure and pulse			Annual
<b>We accept shared care responsibilities</b>			
<b>Consultant Psychiatrist Name</b>			
<b>Signature</b>			
<b>Date</b>			
<b>Contact number</b>			
<b>E-mail Address</b>			
<b>GP Name</b>			
<b>GP Signature</b>			

This form should be signed by the GP and kept in the practice notes. A copy should also be sent to the Consultant Psychiatrist for scanning and entry to the patients' electronic notes, Open RiO.

**Appendix C.2**

<b>This form is a request for the General Practitioner to take over the prescribing of long-acting injectable antipsychotics (LAIs). CMHT will continue to administer under shared care arrangement</b>			
GP Name & Address			
<b>Patient's Name</b>		<b>Date of birth</b>	
<b>NHS number</b>			
<b>Name of medicine</b>		<b>Dose</b>	
<b>Frequency of administration</b>			
<b>Route</b>	Gluteal / Deltoid (delete as applicable)		
<b>Diagnosis and Rationale for Treatment</b> (including brief details of other agents tried and where applicable, adverse effects and any ongoing monitoring requirements)			
<p align="center"><b>CMHT will retain responsibility of monitoring mental health and will agree to send written confirmation to GP when LAIs are administered.</b></p> <p><b>Name of Care-co-ordinator if applicable:</b> _____</p>			
<b>Investigations done at baseline</b>	<b>Date Checked</b>	<b>Comments</b>	<b>Continued monitoring by GP</b>
Weight (include BMI ideally)			Three monthly
Fasting lipids			Annual
Blood glucose (random/ fasting)			Annual
Liver Function			Annual
ECG			Annual (if indicated)
U&Es			Annual
FBC			Annual
Prolactin			Annual
Blood pressure and pulse			Annual
<b>We accept shared care responsibilities</b>			
<b>Consultant Psychiatrist Name</b>			
<b>Signature</b>			
<b>Date</b>			
<b>Contact number</b>			
<b>E-mail Address</b>			
<b>GP Signature</b>			

This form should be signed by the GP and kept in the practice notes. A copy should also be sent to the Consultant Psychiatrist for scanning and entry to the patients' electronic notes, Open RiO.