NELFT, BHR CCGs GPs, WF CCG GPs Shared Care Guidelines

SHARED CARE GUIDELINES ON LITHIUM

DOCUMENT TO BE SCANNED INTO ELECTRONIC RECORDS AS AND FILED IN NOTES

Patient Name : **Date of Birth:** **NHS No:**

Name of Referring Consultant: **Contact number:**

INTRODUCTION – Indication and Licensing

- In the management of acute mania or hypomanic episodes
- In the management of episodes of recurrent depressive disorders where treatment with other antidepressants has been unsuccessful
- Prophylaxis of bipolar affective disorder
- Control of aggressive behaviour or intentional self-harm

PATIENT PATHWAY

There have been deaths, severe harms and a substantial number of reports relating to lithium therapy. Analysis of errors reported to the National Patient Safety Agency (NPSA) Reporting and Learning System suggests lithium therapy is an error-prone process. Monitoring of lithium therapy is a specific issue. As a result NPSA issued an alert for all organisations in the NHS to implement the following:

1. Patients prescribed lithium are monitored in accordance with NICE guidance;
2. There are reliable systems to ensure blood test results are communicated between laboratories and prescribers;
3. At the start of lithium therapy and throughout their treatment patients receive appropriate on-going verbal and written information and a record book to track lithium blood levels and relevant clinical tests*;
4. Prescribers and pharmacists check that blood tests are monitored regularly and that it is safe to issue a repeat prescription and/or dispense the prescribed lithium, and;
5. Systems are in place to identify and deal with medicines that might adversely interact with lithium therapy.

The aims and objectives of this Shared Care Guidelines are to implement the following NPSA Patient Safety Alert actions to ensure Lithium therapy is initiated, prescribed, dispensed and monitored accordingly to enhance patient safety.

This document outlines ways in which the responsibilities for managing patients on lithium therapy are shared between the specialist and general practitioner (GP). GPs are requested to participate in this process. If the GP is not confident to undertake these roles initially further advice and support will be available from the Specialist Prescriber. Clinical responsibility lies with the clinician who signs the prescription. If a specialist asks the GP to prescribe this drug, the GP should reply to this request within two weeks.

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ORAL DOSE AND ADMINISTRATION

- Start at 400mg at night (200mg in the elderly)
- Adjusted to achieve serum-lithium concentration of 0.4 -1mmol/litre
- Bioavailability varies between brands of lithium, it is therefore important to state the brand required
- Changing brands requires increased attention to plasma monitoring.
- Bioavailability also varies between tablet and liquid preparations

Brand	Preparation Strength	Approx. Li^+ mmol
Tablets		
Camcolit Modified Release (MR) Tablets	400mg	10.8
Priadel Modified Release (MR) Tablets	200mg	5.4
	400mg	10.8
Liquid (lithium citrate)		
Priadel liq	520mg/5ml*	5.5 /5ml

*Each 5ml contains 520mg of the active substance lithium citrate equivalent to 204mg lithium carbonate.

Priadel tablets and Priadel liquid are the preferred choice of brand used within NELFT

- 200 mg Priadel Tablets are approximately equivalent to 5 ml Priadel liquid
- Priadel liquid needs to be given in two *divided doses*
- If patient is stable on another brand, please do not change and continue prescribing the other brand

MONITORING STANDARDS FOR MEDICATION AT NELFT

Monitoring Lithium:

- 'Target' serum level 0.4-1.0 mmo/l (Elderly patients more sensitive to lithium levels and its side effects, so aim for lower range)
- Serum lithium levels to be checked 7 days after initiation and then 7 days after every dose/formulation change or introduction/discontinuation of interacting medication
- Levels to be taken 12 hours post dose*.* Make patients aware of this requirement for accurate levels
- **Weekly monitoring**, until lithium levels stable
- More **FREQUENT** monitoring may be required if there is a co-morbid condition, a question of compliance, relapse, vomiting and diarrhoea, clinical deterioration, abnormal results and when patients start taking or stopping interacting medicines.
- ***Please note long term treatment with lithium can lead to renal impairment and has been associated with thyroid disorders***

If stopping lithium:

- Reduce the dose gradually over at least 4 weeks, and preferably up to 3 months, even if the person has started taking another antimanic medicine.
- During dose reduction and for 3 months after lithium treatment is stopped, monitor the person closely for early signs of mania and depression

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Table 1

Checks	**Pre-treatment (NELFT)**	**When treatment is stablised (GPs)**
Urea and electrolytes including e-GFR, calcium and full blood count	Yes	Every 6 months (more often in elderly or if there is evidence of impaired renal function (elevated urea and creatinine levels or fall in eGFR) and raised calcium levels over 2 or more tests)
T_4, TSH	Yes	Every 6 months (more often if there is evidence of impaired thyroid function or an increase in mood symptoms that might be related to impaired thyroid function)
ECG	Yes	Every 12 months for patients with significant cardio vascular disease or risk factors for it
Weight or BMI	Yes	Every 6 months
Lithium level (maintenance dose) 0.4 – 1.0 mmol/l (12 hours post dose)	-	First year - Every 3 months After the first year – every 6 months. After the first year - every 3 months for people in any of the following groups: • People aged 65 years and over • People taking drugs that interact with lithium • People who are at risk of impaired renal or thyroid function, raised calcium levels or other complications • People who have poor symptom control • People with poor adherence • People whose last plasma lithium level was 0.8 mmol/ litre or higher
Response to abnormal lithium levels		• If Lithium levels are above or below the range, confirm with patients the timing of the blood test and compliance with lithium • Lithium levels below the range should be discussed with the specialist services contact and consideration given to increasing the dosage. • Levels above the range should also be discussed urgently with the specialist service contact and consideration given to referring patients to A&E or stopping the lithium for a period of time and restarting at a lower dose once the lithium level is within the normal range. • All lithium levels **above** the range should be rechecked urgently and consider urgent medical review • Review patient and look for signs of toxicity and side-effects

The patient lithium monitoring book must be updated at each visit. If the hospital has the monitoring responsibility, the hospital is responsible for contacting the patient if any action is required. If the GP

has the monitoring responsibility, the GP is responsible for contacting the patient if any action is required

KEY ADVERSE EFFECTS & ACTIONS

Side effects

- Most common side effects include tremor, stomach upset, polyuria and polydipsia.
- Less common side effects include weight gain, oedema, hypothyroidism and rashes.
- Some skin conditions such as psoriasis and acne can be aggravated

Signs of toxicity

- Toxicity is likely above 1.5mmol/litre, however can occur within range i.e. in the elderly
  - Symptoms include blurring of vision, anorexia, vomiting, diarrhoea, drowsiness, giddiness, ataxia, gross tremor and lack of co-ordination
  - At very high levels, hyperreflexia, hyperextension of limbs, convulsions, toxic psychosis and oliguria may occur.
- Monitor for symptoms of neurotoxicity, including paraesthesia, ataxia, tremor and cognitive impairment, which can occur at therapeutic doses.
- On rare occasions within normal range, symptoms of lithium toxicity can occur.
- If any of the symptoms are experienced by the patient, then lithium therapy should be stopped immediately and lithium levels checked urgently. Consider urgent medical referral and psychiatric advice, and refer back to consultant psychiatrist.

Interactions

- Lithium is renally excreted (it is not metabolised) and hence has renally-mediated drug-drug interactions
- Lithium toxicity is made worse by sodium depletion, therefore concurrent use of diuretics particularly thiazides is hazardous and should be used with caution and monitored appropriately.
- Interactions which increase lithium concentrations:
  - NSAIDs, ACEIs, diuretics, tetracycline's, metronidazole
- Interactions which may decrease lithium concentrations:
  - Theophylline, sodium bicarbonate containing products
- Interactions causing neurotoxicity:
  - Antipsychotics, SSRIs, carbamazepine, methyldopa
- If no other alternative can be found and interacting medications are used then lithium levels need more frequent monitoring (on initiation and discontinuation)
- See BNF, appendix 1, for further interactions

Cautions

- Vomiting, diarrhoea and intercurrent infection (especially if sweating profusely) may require dose reduction or discontinuation
- Elderly patients are particularly liable to lithium toxicity
  - Lithium excretion may be reduced
  - May exhibit adverse reactions at serum levels ordinarily tolerated by younger patients

Contra-indications

- Avoid if hypersensitivity to lithium or to any of the excipients
- patients with low body sodium levels, including for example dehydrated patients or those on low sodium diets

- cardiac disease or family history of QT prolongation
- Brugada syndrome or family history of Brugada syndrome
- conditions with sodium imbalance such as Addison's disease
- breast feeding
- Renal impairment
  - Avoid if possible or reduce dose and monitor serum-lithium carefully
- Untreated hypothyroidism
  - Patients are to be euthyroid before initiation of lithium therapy
  - Advise patient to seek attention if symptoms of hypothyroidism develop e.g. lethargy, feeling cold

This only lists the key important ADRs-For comprehensive information on cautions, contra-indications and interactions please refer to the current British National Formulary and Summary of Product Characteristics.

PREGNANCY AND BREAST FEEDING

- Pregnancy
  - Avoid in the first trimester due to risk of teratogenicity, including cardiac abnormalities
  - Dose requirements increased during the second and third trimesters but on delivery return abruptly to normal. Close monitoring of serum-lithium concentration advised (risk of toxicity in neonate)
  - It is advisable that women of child bearing age should adopt adequate contraceptive methods

- Breast feeding
  - Present in milk and risk of toxicity in infant - avoid

For comprehensive information please refer to the current British National Formulary and Summary of Product Characteristics or seek advice from NELFT Perinatal service on Tel No: 03005551119 or email:Perinatal.service@nelft.nhs.uk

SHARED CARE

Shared care guideline*:* is a document which provides information allowing patients to be managed safely by primary care, secondary care and across the interface. It assumes a partnership and an agreement between a hospital specialist, GP and the patient and also sets out responsibilities for each party. The intention to shared care should be explained to the patient and accepted by them. Patients are under regular follow-up and this provides an opportunity to discuss drug therapy. Intrinsic in the shared care agreement is that the prescribing doctor should be appropriately supported by a system of communication and cooperation in the management of patients. The doctor who prescribes the medicine has the clinical responsibility for the drug and the consequence of its use**.**

Consultant

1. Lithium therapy will usually be initiated by a consultant psychiatrist. A GP with special interest may consider restarting lithium (preferably in consultation with a psychiatrist) for the same diagnosis if the patient has previously benefited but has relapsed since discontinuation.
2. Baseline investigation will be undertaken before initiating lithium (Table 1)
3. Issuing and ensuring understanding of the NPSA lithium pack
4. Provide appropriate on-going verbal and written information to patient
5. Clinicians to update record book where appropriate
6. Ensuring first blood test is done and checked. This may be done by GP with specialist interest in primary care but must be agreed by both parties
7. Monitoring the side effects to be agreed by both parties

8. Provide a comprehensive referral letter to the GP and also indicating when the patient should be referred back to the consultant
9. Conditions of assuming responsibility by the GP agreed and a shared care document sent. Patient on CPA(Care Programme Approach) should remain with Secondary Care unless agreed by GP and stated on the CPA
10. Both parties should ensure that results are shared by both sectors and means of doing this should be agreed

11. Criteria for transferring prescribing and/or discharging to GP

- All patients to have been counselled and have an up to date lithium monitoring book
- All patients will continue with hospital prescribing until the patient has stable dose and only routine monitoring required (i.e. 3 months).
- The consultant/specialist will send a full referral letter giving details of patient's response to therapy. The letter will list any drugs or investigations recommended by the consultant and previous test results.
- The consultant will request that the GP consider taking over the monitoring requirements as per shared care guidelines, which is considered safer than splitting the prescribing and monitoring across care sectors
- The patient will continue to be monitored via shared care until deemed stable to be discharged from mental health services

General Practitioner

1. Reply to the request for shared care as soon as possible and clarify with the hospital specialist who is to take responsibility for issuing the blood tests and monitoring. **Whoever issues the blood requests must act upon the results.**
2. Request patient brings their monitoring book with them, whenever requesting a further supply of lithium.
   - To check lithium dose and blood results (see table 1) prior to deciding if safe to continue to prescribe.
   - To update patient's monitoring book where appropriate. Check with the relevant pathology lab if patient has been tested but no results available
3. Prescribe lithium by brand
4. Ensure patient understands that branded product is lithium
5. Use of phrases such as 'as directed' should be avoided and should state specific instructions.
6. Prescriptions are recommended to be provided as Acute prescription or with appropriate safe guarding.
7. Where Repeat prescriptions are necessary, it is recommended that 28 day prescription is adopted
8. Ensure patients are aware of their blood testing requirements. Patients should be encouraged to know acceptable levels and their most recent results
9. Provide appropriate on-going verbal and written information to patient. Choice and medication information leaflets can be accessed via this link: North East London NHS Foundation Trust : Choice and Medication
10. Monitor for drug interaction
11. Monitor for side-effects or adverse effects as specified earlier
12. Additional tests and investigations during maintenance therapy if abnormal results obtained or as stated by the consultant
13. Consider referral back to consultants for review of stable patients on lithium for 3 years
14. Lithium patients discharged from Mental Health Services can be referred urgently via Borough based Intake Teams for advice and/or review.

CCG

1. To provide feedback to trusts via the Drug and Therapeutics Group
2. To advise and support GPs in relation to accepting clinical responsibility for prescribing and effects on their prescribing budget
3. To support trusts in resolving issues that may arise as a result of shared care

Costs

Drug Product	Pack size	Cost in primary care (BNF 70)
Camcolit M/R 400mg tablets	100	£4.30
Priadel M/R 200mg tablets	100	£2.30
Priadel M/R 400mg tablets	100	£3.35
Priadel liquid 520mg/5ml	150 mls	£5.61

RESOURCES AVAILABLE

Information about Lithium and other Mental Health Medications (Choice and Medication)

Patient information is also available on NELFT web site on over 110 medicines and 18 mental health conditions. One can also obtain information on side-effects or compare medicines for conditions and some in different languages i.e. Mandarin Chinese, Polish, Spanish and many more. To obtain this information:
a) Go to www.nelft.nhs.uk
b) Go to quick links on the right hand side and select Information about medication
c) Click on choice and medication

Lithium Treatment packs may be purchased from Xerox
Tel: 0845 610 1112
Email: nhsorders@Xerox.com

Contact details		
NELFT switchboard		0300 555 1201
B&D Access & Assessment Team	Becontree Centre, 508 Becontree Avenue, Dagenham, RM8 3HR	Tel: 0300 555 1038 Fax: 0844 931 0133
Havering Access & Assessment Team	Oasis House 28-30 Gubbins Lane, Harold Wood, Romford RM3 0QA	Tel: 0300 555 1092 Fax: 0844 493 0216 Email: HAA.Team@nhs.net
Redbridge Access & Assessment and Brief Intervention	Mellmead House 4 Orchard Close, Rodney Road, Wanstead, E11 2DH	Tel: 0300 555 1088 Fax: 0844 493 0250 Email: RAA.Team@nhs.net

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Service		
WF Access & Assessment Service	Wood House Thorpe Combe Hospital, 714 Forest Road, Walthamstow E17 3HP	Tel: 0300 555 1242 Fax: 0844 493 0263 Email: WFAA.Team@nhs.net
Barking Community Hospital	Upney Lane Barking IG11 9LX	Tel: 0300 555 1038 Fax: 0844 913 0133 Email: BDAA.Team@nhs.net
NELFT Pharmacy	Emerald Room, Maggie Lilley Suite, Goodmayes Hospital, Barley Lane, Ilford IG3 8XJ	Tel: 0300 555 1201 ext. 64383 Fax: 08449310116
BHR CCGs	Becketts House, 2-14 Ilford Hill, Ilford IG1 2QX	0208 822 3074 or 0208 822 3076 or 0208 822 3057 Fax. 0208 926 5423
WF CCG	7 Kirkdale Road, Leytonstone, E11 1HP	020 3688 2654

References

1) National Institute for Heath and Care Excellence: Bipolar disorder: Assessment and management (CG185) http://www.nice.org.uk/guidance/cg185
2) National Institute for Heath and Care Excellence: Depression in Adults: The treatment and management of depression in adults. Clinical Guidance 90. http://www.nice.org.uk/nicemedia/pdf/Depression_Update_FULL_GUIDELINE.pdf
3) eBNF : accessed via https://www.medicinescomplete.com/mc/bnf/current/ 27.10.15
4) Priadel 200mg & 400mg PR tablets summary of product characteristic last updated on the eMC: 19/06/2015 www.medicines.org.uk
5) The Maudsley Prescribing Guidelines 12th edition by D Taylor, C Paton and S Kapur.
6) Psychotropic Drug Directory 2014 by S Bazire

Refer to the relevant BHR CCG website to obtain the latest version of this guideline

http://www.barkingdagenhamccg.nhs.uk/About-us/Medicines-management/shared-care-guidelines.htm
http://www.haveringccg.nhs.uk/About-us/medicines-management/shared-care-guidelines.htm
http://www.redbridgeccg.nhs.uk/About-us/Medicines-management/shared-care-guidelines.htm

Refer to WF CCG website to obtain the latest version of this guideline

http://gp.walthamforestccg.nhs.uk/management/medicines/prescribing/sharedcareguidlines/

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Appendix 1

Excerpt from General Medical Council – Good practice in prescribing and managing medicines and devices (Published 31 January 2013; comes into effect 25 February 2013)

Shared care

35. Decisions about who should take responsibility for continuing care or treatment after initial diagnosis or assessment should be based on the patient's best interests, rather than on your convenience or the cost of the medicine and associated monitoring or follow-up.

36. Shared care requires the agreement of all parties, including the patient. Effective communication and continuing liaison between all parties to a shared care agreement are essential.

Prescribing at the recommendation of a professional colleague

37. If you prescribe at the recommendation of another doctor, nurse or other healthcare professional, you must satisfy yourself that the prescription is needed, appropriate for the patient and within the limits of your competence.

38. If you delegate assessment of a patients' suitability for a medicine, you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to make the assessment. You must give them enough information about the patient to carry out the assessment required. You must also make sure that they follow the guidance in paragraphs 21 – 29 on Consent.

39. In both cases, you will be responsible for any prescription you sign.

Recommending medicines for prescription by colleagues

40. If you recommend that a colleague, for example a junior doctor or general practitioner, prescribes a particular medicine for a patient, you must consider their competence to do so. You must satisfy yourself that they have sufficient knowledge of the patient and the medicine, experience (especially in the case of junior doctors) and information to prescribe. You should be willing to answer their questions and otherwise assist them in caring for the patient, as required.

Shared care prescribing

41. If you share responsibility for a patient's care with a colleague, you must be competent to exercise your share of clinical responsibility.
    You should:
    a) keep yourself informed about the medicines that are prescribed for the patient

    b) be able to recognise serious and frequently occurring adverse side effects

    c) make sure appropriate clinical monitoring arrangements are in place and that the patient and healthcare professionals involved understand them

    d) Keep up to date with relevant guidance on the use of the medicines and on the management of the patient's condition.

42. In proposing a shared care arrangement, specialists may advise the patient's general practitioner which medicine to prescribe. If you are recommending a new, or rarely prescribed, medicine, you should specify the dosage and means of administration, and agree a protocol for treatment. You should explain the use of unlicensed medicines, and departures from authoritative guidance or recommended treatments and provide both the general practitioner and the patient with sufficient information to permit the safe management of the patient's condition.†

43. If you are uncertain about your competence to take responsibility for the patient's continuing care, you should seek further information or advice from the clinician with whom the patient's care is shared or from another experienced colleague. If you are still not satisfied, you should explain this to the other clinician and to the patient, and make appropriate arrangements for their continuing care.

Appendix 2

Lithium Shared Care Guidance

SHARED CARE AGREEMENT LETTER

Name of GP	Practice address	Hospital specialist name	Hospital address

Dear GP

Re: Patient's Name……..……

Date of Birth…….……

Hospital Number……..…….

Indication for ……

Dose……..

Enclosed is a copy of the shared care guidelines for Lithium to be retained in the patient's notes. Should you agree to shared care, we will send a letter containing the details of the patient's treatment plan, the dose to be prescribed and all relevant blood results.

Please advise the patient of the following:

1. Report any adverse effects to their GP and/or specialist
2. Seek medical attention if they develop diarrhoea or vomiting or become acutely ill for any reasons
3. Ensure they maintain their fluid intake, particularly after sweating (for example, after exercise, in hot climates or if they have a fever), if they are immobile for long periods or if they develop a chest infection or pneumonia
4. Ensure that they have a clear understanding of their treatment
5. Report any changes in disease symptoms to GP and/or specialist
6. Alert GP and/or specialist of any changes of circumstance which could affect management of disease e.g. become pregnant or are planning a pregnancy
7. Take/ administer the medication as prescribed
8. Undertake any monitoring as requested by the GP and/or specialist
9. Ensure that their monitoring book is kept up to date
10. Inform their GP in sufficient time to obtain repeat prescriptions
11. Keep lithium pack safe and bring to hospital/GP appointments
12. Show monitoring booklet to pharmacist when collecting medication

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13. Speak to the community pharmacist when buying medicines over-the-counter especially non-steroidal anti-inflammatory medicines

Please sign and return this letter to the Hospital Specialist if you agree to the shared care arrangements for this patient.

Many thanks

Hospital Specialist GP

Signature……... Signature……...

Name ……..…….... Name ……...

Date……... Date……..…..……...

If you are not taking on shared care for this patient please state the reason why and return this letter to the Hospital Specialist.

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