NHS Barnsley Hospital NHS Foundation Trust

NHS South West Yorkshire Partnership NHS Foundation Trust

NHS Barnsley Clinical Commissioning Group

Shared Care Protocol for the Prescribing of Oral Antipsychotics in Adults:

This guideline has been subject to consultation with Psychiatrist Dr Suresh Chari and his colleague's at SWYFT. Consultation was also sought from the pharmacy team at SWYFT. This guideline has been subject to consultation and endorsement by the Area Prescribing Committee on 10th March 2021.

Introduction:

This shared care prescribing guideline for the second generation antipsychotic medications listed, has been developed with due consideration to the appropriate NICE Clinical Guidelines (CG), Psychosis and Schizophrenia in Adults (CG178). Due to the range of licensed and unlicensed indications for the individual antipsychotics, they may be prescribed to treat a number of different conditions.

Traffic Light Status:

Traffic light system classification		
Green	**Amber**	**Red**
Chlorpromazine **Flupentixol** **Haloperidol** **Levomepromazine** **Prochlorperazine** **Sulpiride** **Trifluoperazine** **Zuclopenthixol Dihydrochloride**	**Aripiprazole** **Amisulpride** **Olanzapine** **Quetiapine** **Risperidone**	**Clozapine (for more information please click here)**

All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health monitoring.

Procedure for Initiating Shared Care Arrangements

All practices will be asked to sign up to this shared care guideline in advance for medications classed as Amber on the Barnsley Formulary. Specialist education and training and on-going advice and support is available from the Specialist Team.

The psychiatrist will provide the GP with a treatment plan. When the psychiatrist feels the patient is stable General Practice will be asked to take over the supply and monitoring as detailed in this guideline (on the basis of implied consent).

Sharing of care assumes communication between the specialist team, GP and patient and/or patient's carers. The shared care arrangements should be explained to the patient/carer and accepted by them. The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.

Responsibilities of the specialist initiating treatment

1. Initiate and stabilise treatment with the antipsychotic (this phase is expected to last at least three months). To arrange prescription and evaluate over the **first 3 months**. (Appendix A)
2. To establish baseline weight, BMI, weight circumference, blood pressure, pulse, smoking status, fasting blood glucose or HbA1c, full lipid screen, FBC, U+Es, LFTs, prolactin level and baseline ECG if appropriate. Patient should have a physical health review including an assessment for any movement disorders, nutritional status and levels of physical activity.
   Repeat after 3 months prior to transfer of care.
3. Discuss the benefits and side effects of treatment with the patient and document it in their communications.
4. To provide the GP with an individual patient treatment plan (including dose, titration, diagnosis/indication, confirmation of baseline monitoring) within 10 days of initiating medication (in line with Appendix A).
5. To request that the GP continues prescribing and monitoring in accordance with this shared care guideline when the patient has been stabilised (3 months minimum) and is deemed suitable for shared care.
6. Periodically review the patient's condition and communicate promptly with the GP when treatment is changed.
7. To review the patient and treatment at least once a year until the patient is discharged from the mental health service where this is possible.
8. Advise the GP on when to adjust the dose, stop treatment, or consult with the specialist
9. Report adverse events through the yellow card system and GP.
10. Ensure arrangements exist for GPs to be able to contact mental health services for advice and guidance.
11. Specialist should indicate specific diagnosis clearly in their letter. They should also make sure the diagnosis is covered by the SCG before requesting GPs to take over prescribing.
12. Psychiatrist must complete the proforma in Appendix C and send to the GP prior to discharging those patients taking antipsychotics who are deemed clinically stable and who no longer need to be reviewed by the mental health team from the service.

Responsibilities of other prescribers

Acceptance of Responsibility by the Primary Care Clinician
It is optional for GPs to participate in taking on responsibility for shared care for the patient. GPs will take on shared care only if they are willing and able.

1. Prescribe and adjust the dose of antipsychotic as recommended by mental health services.
2. To monitor physical parameters including weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC. This should be performed at least annually unless instructed sooner by mental health services. Annual ECG would be good practice given the propensity of Q-T prolongation but can be instructed by Psychiatrist in relation to this. Prolactin levels are not routinely required unless instructed otherwise.
3. Report to and seek advice from the specialist on any aspect of patient care that is of concern to the GP and may affect treatment.
4. Refer back to specialist if the patient's condition deteriorates, as advised.
5. Stop treatment on the advice of the specialist or immediately if an urgent need to stop treatment arises.
6. Report adverse events through the yellow card system and GP.
7. GPs should not routinely issue prescriptions until they are asked to take over prescribing by the specialist.
8. To contact the Mental Health Service as per Appendix C if the GP subsequently has concerns or identifies risks around the patient's mental health and the patient has been discharged from the service.

Patient responsibilities:

1. To attend appointments with specialists and GP practice for monitoring of medication.
2. To report to the specialists or the GP any changes in mental state, including any deterioration of existing or development of new mental illness.
3. Report any side effects to medication to specialists or the GP.
4. Report any significant change in physical health to specialists or the GP e.g. changes in smoking status or starting a new medication.
5. To take medication as prescribed. If taking the medication differently to what has been prescribed or have stopped to inform specialists or the GP.

Background information

Here is a list of general cautions, warnings, side effects and drug interactions associated with all anti-psychotic medication and should be considered with each individual drug monograph.
Please note this is not an exhaustive list and so needs to be used in conjunction with the individual drugs summary of product characteristics, a link to which can be found under each medication.

Special warnings and precaution (general)

Blood dyscrasias: A rare but potentially life threatening side effect of antipsychotics. It is usually associated with clozapine but can occur with any antipsychotic medication.

Cardiometabolic health: All antipsychotics have some risk of development of metabolic syndrome potentially leading to obesity, deranged lipid profiles, impaired glucose tolerance and increased blood pressure. Therefore, patients are more at risk of going on to develop or exacerbate pre-existing cardiovascular disease and diabetes (occasionally associated with ketoacidosis or coma). Studies have shown that people with serious mental illness such as Schizophrenia die on average 15-20 years younger than the general population. Patients prescribed antipsychotics should have their cardiometabolic health monitored at least annually.

QTc Prolongation: Antipsychotics can prolong QTc interval and increase the risk of developing arrythmias. Different antipsychotics have variable propensity to prolong the QTc interval. Caution is advised when prescribing antipsychotics in patients with known cardiovascular disease or alongside medication known to prolong QT interval. Haloperidol has a high risk of QTc prolongation and a baseline ECG is recommended prior to initiation.

Epilepsy or predisposition to seizures: All antipsychotics have the potential to lower the seizure threshold, caution is advised.

Parkinson's disease (and Lewy body dementia): Antipsychotics should be avoided or used with extreme caution. Patients are more sensitive to developing severe extra-pyramidal side effects (EPSEs)/exacerbation of movement symptoms. If required, then low dose antipsychotic with a low binding affinity for D2 receptors should be used e.g. quetiapine or clozapine.

Renal or hepatic impairment: Refer to individual SPC monographs for further advice. Antipsychotics have been rarely associated with hepatitis/hepatic injury and should be used with caution in patients with a history of liver disease or jaundice.

Elderly patients: Antipsychotics increase the risk of falls, hypotension, EPSEs, over sedation and confusion.
Some antipsychotics (e.g. chlorpromazine, clozapine, flupenthixol, fluphenazine, pipothiazine, promazine and zuclopenthixol) are high risk for anticholinergic side effects including urinary retention and constipation.
Elderly patients are in general more sensitive to side effects and are more likely to have other comorbidities and medications that increase the risk further.

Patients with dementia: Antipsychotics prescribed for the management of behaviour and psychological symptoms of dementia (BPSD) should be avoided, unless symptoms are severe and other non-pharmacological treatments have failed.
The decision to prescribed antipsychotics for BPSD requires carefully weighing up the benefits and the risks (increased risk of stroke). If antipsychotics are prescribed for BPSD there should be clear documentation of target symptoms, how response will be measured and a time scale for review. If there is limited or no benefits then the antipsychotic should be stopped.

Pregnancy and breast-feeding: Antipsychotics should only be prescribed after careful consideration of the risk and benefits posed to the mother and baby. Advice should be sought from specialist mental health services.

Patients with learning disabilities: Antipsychotics prescribed in the management of behaviours that challenge should generally be avoided, unless psychological or other interventions alone do not produce change within an agreed time; treatment for any coexisting mental or physical health problem has not led to a reduction in behaviour; the risk to the person or others is very severe. If antipsychotics are prescribed there should be clear documentation of target symptoms, how response will be measured and a time scale for review. Antipsychotic should be offered in combination with psychological therapies. If there is no or limited benefits, then the antipsychotic should be stopped.

Driving and operating machinery: Antipsychotic may impair concentration and increase drowsiness. Patients should be advised not to drive or operate machinery until the full effects are known.
For further advice regarding driving please see https://www.gov.uk/guidance/psychiatric-disorders-assessing-fitness-to-drive

Others: Antipsychotics should be used with caution in patients with myasthenia gravis; photosensitisation; prostatic hypertrophy; severe respiratory disease; susceptibility to angle-closure glaucoma

Side effects

Antipsychotics have broad spectrum of side effects. Please refer to individual SPC monographs for further advice.

The cardinal side effects of antipsychotics include:

Extra-pyramidal side effects (EPSE): These are movement disorders than can be further sub-divided into akathisia, dystonia, parkinsonism, tardive dyskinesia. They are more associated with first generation (typical) antipsychotics, high doses or rapid dose escalation and abrupt treatment discontinuation. Men, young people, children and antipsychotic-naïve patients are more at risk.

Cardiometabolic syndrome: weight gain, obesity, dyslipidaemia, impaired glucose tolerance and increase blood pressure have been associated with all antipsychotics.
Olanzapine and clozapine are particularly high risk for weight gain.

Hyperprolactinemia: Symptoms of elevated prolactin may include sexual dysfunction, menstrual disturbances, breast growth and galactorrhoea. With long term use osteoporosis and development of some hormone dependent breast cancers can develop. Antipsychotics known to be high risk of elevating prolactin (Amisulpride, Sulpride Risperidone, Paliperidone and all first generation (typical) antipsychotics) should be avoided in young females, patients under 25 years of age and patients with osteoporosis or a history of hormone dependent breast cancer.

Neuromalignant syndrome (NMS): A rare but potentially life threating condition. If suspected all antipsychotic drugs should be immediately stopped and urgent medical attention sought.

Other common side effects include sedation, dizziness, hypertension, orthostatic hypotension, hyponatremia, pneumonia, venous thromboembolism, depression, urinary retention, vomiting, insomnia, constipation, rash, sexual dysfunction (independent of prolactin levels), QTc prolongation and thermal dysregulation.

Rarely sudden death, withdrawal syndrome in neonates.

Table 1 relative adverse effects of antipsychotic drugs

Antipsychotic	Sedation	Weight gain	Akathisia	Parkinsonism	Anticholinergic	Hypotension	Elevated prolactin
Chlorpromazine	+++	++	+	++	++	+++	+++
Flupentixol	+	++	++	++	++	+	+++
Haloperidol	+	+	+++	+++	+	+	++
Sulpiride	-	+	+	+	-	-	+++
Trifluoperazine	+	+	+	+++	+	+	+++
Zuclopenthixol	++	++	++	++	++	+	+++
Aripiprazole	-	-	+	-	-	-	-
Amisulpride	-	+	+	+	-	-	+++
Olanzapine	++	+++	-	-	+	+	+
Quetiapine	++	++	-	-	+	++	-
Risperidone	+	++	+	+	+	++	+++

+++ high incidence/severity; ++ moderate; + low; – very low.
Levomepromazine and prochlopromazine has similar side effect profile to chlorpromazine

Drug interactions

Please refer to individual SPC monographs for further advice.
Prescribers should be cautious of co-prescribing any medications that could compound the risk of central nervous depression or sedation, known to prolong QTc, potent CYP450 enzyme inducers/inhibitors and add to the accumulative anticholinergic burden.

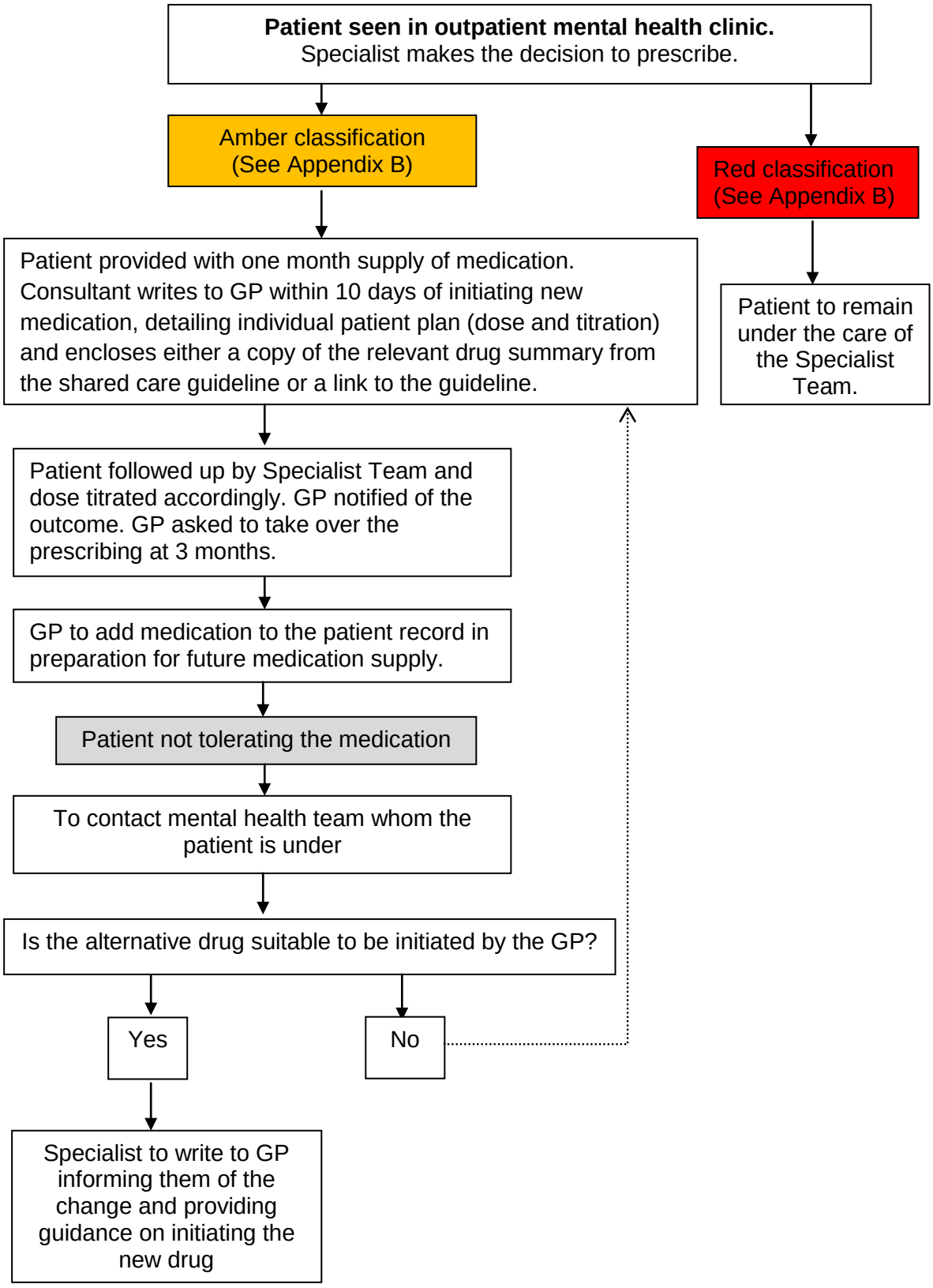
Communication

Specialist to GP
The specialist will inform the GP when they have initiated relevant medication. When the patient is near completing the satisfactory initiation period, the specialist will write to the GP to request they take over prescribing.

GP to specialist
If the GP has concerns over the prescribing of medication specified within this guideline, they will contact the specialist as soon as possible.

Contact Details	Telephone number	Email
Barnsley Single Point of Access	01226 645000	
Kendray Hospital Pharmacy team	01226 644338	kendraypharmacyteam@nhs.net
Gillian Smith Medicines Information Pharmacist, BHNFT	01226 432857	gilliansmith2@nhs.net
Chris Lawson, Head of Medicines Management, NHS Barnsley CCG	01226 433798	chris.lawson@nhs.net
Sarah Hudson, Deputy Chief Pharmacist Pharmacist, SWYPFT	01226 644339	sarah.hudson@swyt.nhs.uk

Appendix A – Process for initiating Shared Care



Appendix B – Drug summaries

Drug class	Drug	Barnsley traffic light status
First generation antipsychotics	Chlorpromazine	Green
	Flupentixol	Green
	Haloperidol	Green
	Levomepromazine	Green
	Prochlopromazine	Green
	Sulpiride	Green
	Trifluoperazine	Green
	Zuclopenthixol	Green
Second generation antipsychotics	Aripiprazole	Amber
	Amisulpride	Amber
	Olanzapine	Amber
	Quetiapine	Amber
	Risperidone	Amber
	Clozapine	Red

Chlorpromazine:

SPC available at: https://www.medicines.org.uk/emc/product/3476/smpc
See BNF at: https://bnf.nice.org.uk/drug/chlorpromazine-hydrochloride.html

Licensed Indications: Schizophrenia or other psychoses (especially paranoia), mania & hypomania and as an adjunct in the short term management of anxiety, psychomotor agitation, excitement, violent or dangerously impulsive behaviour.

Dose: Initially 25mg TDS or 75mg at bedtime, increasing by 25mg daily to an effective maintenance dose. This is usually in the range of 75mg to 300mg daily but some patients may require up to 1,000mg daily. In the elderly use a third to half the normal adult dose.

Preparations available:
Tablets **–** Generic: available as 25mg, 50mg & 100mg.
Oral Solution: – Generic: available as 25mg/5ml oral solution, 25mg/5ml oral solution s/f & 100mg/5ml oral solution.

The following is not intended as an exhaustive list of cautions, contra-indications, side effects and drug interaction, but to highlight/emphases information specific to that drug.
This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: CNS depression, comatose states, Hypothyroidism, Cardiac failure, Phaeochromocytoma, Myasthenia gravis, Hypersensitivity to chlorpromazine, phenothiazines or one of the other constituents, Risk of angle-closure glaucoma, Risk of urinary retention related to urethroprostatic disorders, History of agranulocytosis, Dopaminergic antiparkinsonism agents, Nursing mothers, Gluten allergy or intolerance, Citalopram, escitalopram.

Cautions: chlorpromazine increases susceptibility to sunburn and patients should be warned about this and measures to protect their skin, can cause pigment changes in the skin (blue/grey colour), eyes and other tissue.
Increased risk of hypothermia & hyperpyrexia have been reported and more common in the elderly or those with hypothyroidism, epilepsy and acute withdrawal syndrome if stopped abruptly.

First generation antipsychotics should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Side Effects: Common or very common: Anxiety; glucose tolerance impaired; mood altered; muscle tone increased. Frequency not known: Accommodation disorder; angioedema; atrioventricular block; cardiac arrest; eye deposit; eye disorders; gastrointestinal disorders; hepatic disorders; hyperglycaemia; hypertriglyceridaemia; hyponatraemia; photosensitivity reaction; respiratory disorders; sexual dysfunction; SIADH; skin reactions; systemic lupus erythematosus (SLE); temperature regulation disorder; trismus.

Drug Interactions:
Dopaminergics (quinagolide, cabergoline), citalopram and escitalopram are contraindicated with chlorpromazine.
Chlorpromazine is not recommended in combination with Dopaminergic antiparkinsonism agents (amantadine, bromocriptine, cabergoline, levodopa, lisuride, pergolide, piribedil, ropinirole), Levodopa, lithium and alcohol.
Topical gastrointestinal agents at the same time (leave 2 hours after if needed), antihypertensives (as increased risk of postural hypotension),

Monitoring: All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health review, this should include an assessment of the patients weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC.
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Flupentixol:

SPC available at: https://www.medicines.org.uk/emc/product/997/smpc
See BNF at: https://bnf.nice.org.uk/drug/flupentixol.html

Licensed Indications: Schizophrenia and other psychoses. symptomatic treatment of depression (with or without anxiety).

Dose:
Schizophrenia and other psychoses: 3mg – 9mg twice daily (maximum dose 18mg daily) titrated to the needs of the patient. In the elderly initial doses should be reduced to a quarter or half the normal dose.
Symptomatic treatment of depression (with or without anxiety): 1mg as a single morning dose. After one week the dose may be increased to 2mg if there is inadequate clinical response. Daily dosage of more than 2mg should be in divided doses up to a max of 3mg/day.

Preparations available:
Tablets – Fluanxol 0.5mg & 1mg, Depixol 3mg

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: Hypersensitivity to the active substance or to any of the excipients. Severe depression requiring ECT or hospitalisation, states of excitement or overactivity, including mania, circulatory collapse, depressed level of consciousness due to any cause (e.g. intoxication with alcohol, barbiturates or opiates), coma. Not recommended for excitable or agitated patients.

Cautions: Cardiac disorders; cardiovascular disease; cerebral arteriosclerosis; elderly; hyperthyroidism; hypothyroidism; parkinsonism; phaeochromocytoma; QT-interval prolongation; senile confusional states.

Side Effects: *Common or very common:* Appetite abnormal; asthenia; concentration impaired; depression; diarrhoea; dyspnoea; gastrointestinal discomfort; headache; hyperhidrosis; hypersalivation; muscle complaints; nervousness; palpitations; sexual dysfunction; skin reactions; urinary disorder; vision disorders. *Uncommon*: Confusion; flatulence; hot flush; nausea; oculogyration; photosensitivity reaction; speech disorder. *Rare or very rare*: Glucose tolerance impaired; hyperglycaemia; jaundice; thrombocytopenia. *Frequency not known*: Suicidal tendencies.

First generation antipsychotics should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Drug Interactions: please read "drug interactions" above.

Monitoring: All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health review, this should include an assessment of the patients weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC.

Haloperidol:

SPC available at: https://www.medicines.org.uk/emc/product/10907/smpc
See BNF at: https://bnf.nice.org.uk/drug/haloperidol.html

Licensed Indications: Treatment of schizophrenia & schizoaffective disorder, acute treatment of delirium where non pharmacological strategies have failed, treatment of moderate to severe manic episode of bipolar 1 disorder, treatment of persistent aggression & psychotic symptoms in patients with moderate to severe Alzheimers dementia & vascular dementia where non pharmacological strategies have failed & where risk of harm to themselves or others, treatment of tic disorders including Tourette's syndrome, treatment of mild to moderate chorea in Huntington's disease

Dose:
Treatment of Schizophrenia and Schizoafective disorder: 2mg to 10mg daily as a single or twice daily dose. First episodes usually respond to doses of 2mg to 4mg daily while multi-episode schizophrenia may require up to 10mg day. Doses above 10mg daily have shown superior efficacy but specialists can increase dose up to a maximum of 20mg daily.
Acute treatment of delirium: 1mg to 10mg daily as a single dose or in 2 to 3 divided doses. Max 10mg/day.
Treatment of moderate to severe manic episode of Bipolar 1 disorder: 2mg to 10mg daily in a single or divided dose. Limited benefit over 10mg daily but can be increased by specialist to a maximum of 15mg daily.
Treatment of persistent aggression & psychotic symptoms in patients with moderate to severe Alzheimers dementia & vascular dementia where non pharmacological strategies have failed & where risk of harm to themselves or others: 0.5mg to 5mg daily as a single or divided dose. Treatment needs to be reassessed after no more than 6 weeks.
Treatment of tic disorders including Tourette's syndrome: 0.5mg to 5mg daily as a single or divided dose. The need for continued treatment must be reassessed every 6-12 months.
Treatment of mild to moderate chorea in Huntington's disease: 2mg to 10mg daily in a single or divided dose.

Preparations available:
Tablets – Generic: 0.5mg, 1.5mg, 5mg, 10mg.
Liquid – Generic: 5mg/5ml oral solution s/f, 10mg/5ml oral solution s/f
Brand: Halkid 200 mcg/ml solution (price warning), Haldol 2mg/ml oral solution.

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: Hypersensitivity to the active or excipients, Comatose state, central nervous system depression, Parkinson's disease, dementia with lewy bodies, progressive supranuclear palsy, known QTc prolongation or congenital long QT syndrome, recent acute myocardial infarction, uncompensated heart failure, history of ventricular arrhythmia or torsades de pointes, uncorrected hypokalaemia and concomitant treatment with medication that can prolong the QT interval.

Cautions:
Cardiovascular: increased risk of QTc prolongation and/or ventricular arrhythmia have been reported especially with higher doses. Caution in anyone with bradycardia, cardiac disease, family history of QTc prolongation, hyperthyroidism or history of heavy alcohol exposure. Electrolyte disturbance increases risk of ventricular arrhythmias.
Manufacturer advises perform ECG and electrolytes before treatment initiation and assess need for further ECGs and frequency of electrolyte monitoring during treatment.

First generation antipsychotics should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Side Effects:
Common or very common: Depression; eye disorders; headache; hypersalivation; nausea; neuromuscular dysfunction; psychotic disorder; vision disorders; weight decreased. *Uncommon:* Breast abnormalities; confusion; dyspnoea; gait abnormal; hepatic disorders; hyperhidrosis; menstrual cycle irregularities; muscle complaints; musculoskeletal stiffness; oedema; photosensitivity reaction; restlessness; sexual dysfunction; skin reactions; temperature regulation disorders. *Rare or very rare:* Hypoglycaemia; respiratory disorders; SIADH; trismus. *Frequency not known*: Hypersensitivity vasculitis; pancytopenia; rhabdomyolysis; thrombocytopenia; angioedema.

Drug Interactions: Particular care should taken with any drugs known to prolong QTc or cause electrolyte abnormalities.

Monitoring: All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health review, this should include an assessment of the patients weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC.
Periodic ECG monitoring maybe required if advised by cardiology or psychiatry.

Levomepromazine:

SPC available at: https://www.medicines.org.uk/emc/product/1429/smpc
See BNF at: https://bnf.nice.org.uk/drug/levomepromazine.html

Licensed Indications: Schizophrenia, as an alternative to chlorpromazine in schizophrenia especially when it is desirable to reduce psychomotor activity

Dose: Initially 25mg to 50mg daily usually in 3 divided doses.
In bed patients: 100mg to 200mg daily in 3 divided doses. Max dose 1g daily.

Preparations available:
Tablets – Nozinan 25mg.

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Contraindications:
Safety in pregnancy has not been established. CNS depression; comatose states; phaeochromocytoma.

Cautions:
Consider the hypotensive effects, not recommended for ambulant patients over the age of 50 years unless risk of hypotensive reaction assessed. Higher doses only suitable if bed bound/supine. Use with caution in patients with liver dysfunction, cardiovascular disease or any predisposition to QTc prolongation, epilepsy.

First generation antipsychotics should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Side Effects:
Common or very common: Asthenia; heat stroke. Rare or very rare: Cardiac arrest; hepatic disorders. Frequency not known: Allergic dermatitis; confusion; delirium; gastrointestinal disorders; glucose tolerance impaired; hyperglycaemia; hyponatraemia; photosensitivity reaction; priapism; SIADH.
Sedation, hypotension anticholinergic are common and profound.

Drug Interactions:
Levomepromazine and its non-hydroxylated metabolites are reported to be potent inhibitors of cytochrome P450 2D6 (CYP2D6). Co-administration of levomepromazine and drugs primarily metabolised by the CYP2D6 enzyme system may result in increased plasma concentrations of these drugs.

Monitoring:
All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health review, this should include an assessment of the patients weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC.

Prochlorperazine:

SPC available at: https://www.medicines.org.uk/emc/product/4553/smpc
See BNF at: https://bnf.nice.org.uk/drug/prochlorperazine.html

Licensed Indications: Schizophrenia (especially the chronic stage) and mania.

Dose:
Usual effective daily oral dosage is in the order of 75 – 100 mg daily.
Patients vary widely in response. The following schedule is suggested: Initially 12.5 mg twice daily for 7 days, the daily amount being subsequently increased by 12.5 mg at 4 – 7 days interval until a satisfactory response is obtained.
After some weeks at the effective dosage, an attempt should be made to reduce this dosage.
Total daily amounts as small as 50 mg or even 25 mg have sometimes been found to be effective.

Preparations available: Note many forms but licenses for each vary on the product.
Tablets – Generic 5mg
Syrup (Stemetil) – 5mg/5ml syrup.

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: Hypersensitivity to the active substance or excipients. CNS depression; comatose states; phaeochromocytoma.

Cautions:
Photosensitivity, skin sensitisation through handling the drug, hypothyroidism, elderly, hypotension, phaeochromocytoma, myasthenia gravis, prostate hypertrophy, narrow angle glaucoma.

First generation antipsychotics should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Side Effects: *Rare or very rare:* Glucose tolerance impaired; hyperglycaemia; hyponatraemia; SIADH. *Frequency not known:* Photosensitivity reaction; atrioventricular block; autonomic dysfunction; cardiac arrest; consciousness impaired; hyperthermia; jaundice; muscle rigidity; nasal congestion; oculogyric crisis; respiratory depression; skin reactions.

Drug Interactions: Please see "drug interactions" above.

Monitoring: All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health review, this should include an assessment of the patients weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC.

Sulpiride:

See SPC at: https://www.medicines.org.uk/emc/product/2430/smpc
See BNF at: https://bnf.nice.org.uk/drug/sulpiride.html

Licensed Indications: The treatment of acute and chronic Schizophrenia.

Dose: A starting dose of 400mg to 800 mg daily in divided doses (morning and evening) is recommended.

- Predominantly positive symptoms respond to higher doses, and a starting dose of at least 400mg twice daily is recommended, increasing if necessary up to a suggested maximum of 1200mg twice daily. Increasing beyond this has not been shown to produce further improvement.
- Predominantly negative symptoms respond to doses below 800mg daily; therefore a starting dose of 400mg twice daily is recommended. Reducing the dose towards 200mg twice daily will normally increase the alerting effect of Sulpiride.
- Patients with mixed positive and negative symptoms, with neither predominating, will normally respond to a dose of 400mg to 600mg twice daily.

Preparations available:
Tablets – Generic 200mg and 400mg.
Liquid – Generic 200mg/5ml oral solution sugar free.

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: Phaeochromocytoma & acute porphyria, Hypersensitivity to the active drug and/or excipients, Concomitant prolactin dependent tumours e.g. pituitary gland prolactinomas & breast cancer, association with levodopa and antiparkinsonian drugs.

Cautions:
Increased motor agitation has been reported at higher does; in aggressive, agitated or excited phases of disease process, low doses of Sulpiride may aggravate symptoms. Care should be exercised where mania and hypomania is present.
Sulpiride should be used with caution in hypertensive patients, especially in the elderly, due to the risk of hypertensive crisis.

First generation antipsychotics (and particularly sulpiride) should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Caution should be exercised when amisulpride is prescribed in patients with known cardiovascular disease or family history of QT prolongation or other risk factors.

Side Effects: *Common or very common:* Breast abnormalities. *Uncommon*: Hypersalivation; muscle tone increased; orgasm abnormal. *Rare or very rare*: Oculogyric crisis. *Frequency not known:* Cardiac arrest; confusion; dyspnoea; hyponatraemia; SIADH; trismus; urticaria.

Drug Interactions:
Levodopa and dopamine agonists are contra-indicated with sulpiride.
Bradycardia-inducing medication, drugs associated with QTc prolongation, including class Ia & class III antiarrythmic agents are not recommended in combination with sulpride.

Monitoring: All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health review, this should include an assessment of the patients weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC.

Trifluoperazine:

SPC available at: https://www.medicines.org.uk/emc/product/5667/smpc
See BNF at: https://bnf.nice.org.uk/drug/trifluoperazine.html#Search?q=

Licensed Indications: Treatment of symptoms and prevention of relapse in Schizophrenia and in other psychoses, especially of the paranoid type, but not in depressive psychoses.
It may also be used as an adjunct in the short-term management of severe psychomotor agitation and of dangerously impulsive behaviour in, for example, mental subnormality.

Dose: The recommended starting dose for physically fit adults is 5mg twice daily; after a week this can be increased to a total daily dose of 15mg daily. If necessary, further increases of 5mg may be made at 3 day intervals, but not more often. When satisfactory control has been achieved, dosage should be reduced gradually until an effective maintenance level has been established.

No max dose stated in the BNF or SPC; 50mg used by convention.

Preparations available:
Tablets – Generic 1mg & 5mg.
Liquid – Generic 5mg/5ml oral solution sugar free.

The following is not intended as an exhaustive list of cautions, contra-indications, side effects and drug interaction, but to highlight/emphases information specific to that drug.
This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: Hypersensitivity to the active and/or excipients, do not use in comatose patients, particularly if associated with other central nervous system depressants, do not use in those with existing blood dyscrasias or known liver damage, patients with uncontrolled cardiac decompensation.

Cautions:
Nausea and vomiting as a sign of organic disease may be masked by the anti-emetic action of Trifluoperazine.
Phenothiazines should be used with care in extremes of temperature since they may affect body temperature control.

First generation antipsychotics should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Side Effects: *Frequency not known:* Alertness decreased; anxiety; appetite decreased; blood disorder; cardiac arrest; confusion; fatigue; hyperpyrexia; jaundice cholestatic; lens opacity; muscle weakness; oedema; pancytopenia; photosensitivity reaction; postural hypotension (dose-related); skin reactions; thrombocytopenia; urinary hesitation; vision blurred; withdrawal syndrome.

Drug Interactions: See "drug interactions" above.

Monitoring: All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health review, this should include an assessment of the patients weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC.

Zuclopenthixol:

SPC available at: https://www.medicines.org.uk/emc/product/994/smpc
See BNF at: https://bnf.nice.org.uk/drug/zuclopenthixol.html

Licensed Indications: The treatment of psychoses, especially schizophrenia.

Dose: The dosage range from 4mg to 150mg daily in divided doses. The usual initial dose in 20mg to 30mg daily (sometimes higher in acute cases), increasing as necessary. The usual maintenance dose is 20mg to 50mg daily.
Maximum dosage per single dose is 40mg.

Preparations available:
Tablets – Clopixol 2mg, 10mg, 25mg

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: hypersensitivity to the active substance and/or its excipients, circulatory collapse, depressed level of consciousness due to any cause (e.g. intoxication with alcohol, barbiturates, opiates), coma.

Cautions: Hyperthyroidism, hypothyroidism and general cautions above.

Side Effects:. *Frequency not known:* Anxiety; appetite abnormal; asthenia; concentration impaired; confusion; depression; diarrhoea; dyspnoea; eye disorders; fever; flatulence; gait abnormal; gastrointestinal discomfort; glucose tolerance impaired; headaches; hepatic disorders; hot flush; hyperacusia; hyperglycaemia; hyperhidrosis; hyperlipidaemia; hypersalivation; hypothermia; malaise; memory loss; muscle complaints; nasal congestion; nausea; neuromuscular dysfunction; pain; palpitations; paraesthesia; photosensitivity reaction; reflexes increased; seborrhoea; sexual dysfunction; skin reactions; sleep disorders; speech disorder; syncope; thirst; thrombocytopenia; tinnitus; urinary disorders; vertigo; vision disorders; vulvovaginal dryness; weight decreased; withdrawal syndrome.

First generation antipsychotics should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Drug Interactions: See "drug interactions" above.

Monitoring: All patients prescribed antipsychotics, regardless of formulary status are required to have at least annual physical health review, this should include an assessment of the patients weight, BMI, waist circumference, blood pressure, smoking status, fasting blood sugar or HbA1c, full lipid profile, U&E's, LFT's, FBC.

Aripiprazole:

SPC available at: https://www.medicines.org.uk/emc/product/3544/smpc
See BNF at: https://bnf.nice.org.uk/drug/aripiprazole.html

Licensed Indications:
Treatment of Schizophrenia in adults and adolescents aged 15 years and over.
Treatment of moderate to severe manic episodes in Bipolar 1 Disorder and for the prevention of a new manic episode in adults who experienced mainly manic episodes and whose manic episodes responded to Aripiprazole treatment.
Treatment of moderate to severe episodes of mania in Bipolar I Disorder in adolescents ages 13 years and older for up to 12 weeks,.

Prescribing for children/adolescents will be retained by secondary care services.

Dose in adults:
Schizophrenia- adult over 18 years: the recommended starting dose is 10mg to 15mg once daily with a maintenance dose of 15mg daily. Aripiprazole is effective at doses between 10mg and 30mg daily. The maximum daily dose should not exceed 30mg daily.
Child 15 to 18 years: Initially 2mg once daily for 2 days, then 5mg once daily for 2 days, then 10mg daily; thereafter increased if necessary in steps of 5mg to a maximum of 30mg daily.

Manic episodes in Bipolar 1 Disorder- adult over 18 years: the recommended starting dose is 15mg daily as monotherapy or combination therapy. Maximum daily dose is 30mg daily.
Recurrence prevention of manic episodes in Bipolar 1 Disorder- As per manic episodes above, continue at the same dose. Adjustment of daily dosage, including dose reduction should be considered on the basis of clinical status.
Child 13 to 18 years: Initially 2mg once daily for 2 days, then 5mg once daily for 2 days, then 10mg daily; thereafter increased if necessary, in steps of 5mg to a maximum of 30mg daily.
The treatment duration should be the minimum necessary for symptom control and must not exceed 12 weeks. Enhanced efficacy at doses higher than a daily dose of 10 mg has not been demonstrated, and a daily dose of 30 mg is associated with a substantially higher incidence of significant adverse reactions.

Preparations available:
Tablets: generic/Abilify 5mg, 10mg, 15mg & 30mg.
Orodispersible tablets sugar free: generic/Abilify 10mg & 15mg.
Liquid: liquid preparations not on formulary.

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: Sensitivity to the active substance and/or its excipients.

Cautions:
Pathological gambling & other impulse control disorders, particularly with gambling but increased sexual urges, compulsive shopping and binge eating have been reported. Clinicians should ask enquire frequently about this with the patient or care giver. Consider dose reduction or cessation if a patient develops such urges.
Patients with ADHD comorbidity, limited safety date with the use of Aripiprazole & Stimulants.

Side Effects:
Common or very common: Anxiety; appetite abnormal; diabetes mellitus; fatigue; gastrointestinal discomfort; headache; hypersalivation; nausea; vision disorders. *Uncommon:* Depression; hiccups; hyperglycaemia; sexual dysfunction. *Frequency not known:* Aggression; alopecia; cardiac arrest; chest pain; diabetic hyperosmolar coma; diabetic ketoacidosis; diarrhoea; dysphagia; generalised tonic-clonic seizure; hepatic disorders; hyperhidrosis; hypertension; hyponatraemia; laryngospasm; musculoskeletal stiffness; myalgia; oropharyngeal spasm; pancreatitis; pathological gambling; peripheral oedema; photosensitivity reaction; pneumonia aspiration; rhabdomyolysis; serotonin syndrome; speech disorder; suicidal tendencies; syncope; temperature regulation disorder; thrombocytopenia; urinary incontinence; weight decreased.

Drug Interactions:
The manufacture advises that up to double the doses maybe required when potent CYP3A4 inducers are concurrently prescribed. The dose may need to be reduced by up to half when potent CYP3A4 or CYP2D6 inhibitors are concurrently prescribed.

Monitoring: As per responsibilities section above.

Amisulpride:

SPC available at: https://www.medicines.org.uk/emc/product/548/smpc
See BNF at: https://bnf.nice.org.uk/drug/amisulpride.html

Licensed Indications: Treatment of acute and chronic schizophrenic disorders.

Dose: For acute psychotic episodes, doses between 400mg and 800mg daily in divided doses. This can be increased to a maximum of 1200mg daily.
If predominantly negative symptoms, doses between 50mg and 300mg daily are recommended.

- Note: doses up to 300mg can be given as a single daily dose. Greater than this should be divided doses daily.

Preparations available:
Tablets – Generic and the brand Solian 50mg, 100mg, 200mg & 400mg
Liquid– Generic 100mg/ml oral solution sugar free & Solian 100mg/ml oral solution.

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Cautions:
Severe liver toxicity has been reported with use and patients should be instructed to report signs of asthenia, anorexia, nausea, vomiting, abdominal pain or icterus to a physician.

Amisulpride should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long-term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.

Caution should be exercised when amisulpride is prescribed in patients with known cardiovascular disease or family history of QT prolongation or other risk factors.

Contraindications:
Hypersensitivity to the active substance or to the excipients, concomitant prolactin-dependent tumours e.g pituitary gland prolactinomas or breast cancer, phaeochromocytoma, children before the onset of puberty, lactation, Combination with the following medication which could include torsades de pointes: Class Ia antiarrhythmic agents such as quinidine, disopyramide, procainamide; Class III antiarrhythmic agents such as amiodarone, sotalol; Other medicines such as bepidril, cisapride, sultopride, thioridazine, IV erythromycin, IV vincamine, halofantrine, pentamidine, sparfloxacin.

Side Effects:
Common or very common: Anxiety; breast pain; hypersalivation; muscle rigidity; nausea; oculogyric crisis; orgasm abnormal; trismus, hyperprolactinemia. *Uncommon:* Hyperglycaemia. *Frequency not known:* Angioedema; bone disorders; cardiac arrest; confusion; dyslipidaemia; hyponatraemia; nasal congestion; neoplasms; SIADH; urticaria; vision blurred.

Drug Interactions:
Levodopa, dopamine agonists, bradycardia-inducing medication, drugs associated with QTc prolongation, including class Ia & class III antiarrythmic agents are contraindicated in combination with amisulpride.

Monitoring: As per responsibilities section above.

Olanzapine:

SPC available at: https://www.medicines.org.uk/emc/product/3071/smpc
See BNF at: https://bnf.nice.org.uk/drug/olanzapine.html

Licensed Indications: Treatment and maintenance of Schizophrenia, treatment of moderate to severe manic episodes, prevention of recurrence of manic episodes in those who have responded to initial therapy.

Dose: Schizophrenia: Recommended starting dose of 10mg once daily.
Manic episode – Starting dose is 15mg once daily in monotherapy or 10mg once daily in combination with other medicine.
Preventing recurrence in Bipolar Disorder: The recommended starting dose is 10 mg/day. For patients who have been receiving olanzapine for treatment of manic episode, continue therapy for preventing recurrence at the same dose. If a new manic, mixed, or depressive episode occurs, olanzapine treatment should be continued (with dose optimisation as needed), with supplementary therapy to treat mood symptoms, as clinically indicated.
A lower starting dose (5 mg/day) is not routinely indicated but should be considered for those 65 and over when clinical factors warrant.

During treatment for schizophrenia, manic episode, and recurrence prevention in bipolar disorder, daily dosage may subsequently be adjusted on the basis of individual clinical status within the range 5-20 mg/day. An increase to a dose greater than the recommended starting dose is advised only after appropriate clinical reassessment and should generally occur at intervals of not less than 24 hours.

Preparations available:
Tablets – Generic/Zalasta/Zyprexa 2.5mg, 5mg, 7.5mg, 10mg, 15mg & 20mg.
Orodispersible tablets – Generic/Zalasta 5mg, 10mg, 15mg & 20mg.
Oral Lyophilisate – Zyprexa 5mg, 10mg, 15mg & 20mg.

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: Hypersensitivity to the active substance and/or its excipients. Patients with known risk of narrow-angle glaucoma

Cautions:
Bone-marrow depression, hyperesoinophilic disorders; low leucocyte count; low neutrophil count, myeloproliferative disease; paralytic ileus.

Olanzapine is associated with significant weight gain and cardiometabolic syndrome, caution is advised on initiation for patients at risk or have pre-existing cardiovascular disease and/or diabetes.

Side Effects: *Common or very common;* Anticholinergic syndrome; appetite increased; arthralgia; asthenia; eosinophilia; fever; glycosuria; oedema; sexual dysfunction, hypersomnia. *Uncommon;* Abdominal distension; alopecia; breast enlargement; diabetes mellitus; dysarthria; epistaxis; memory loss; photosensitivity reaction; urinary disorders, diabetic coma, ketoacidosis, oculogyration. *Rare or very rare;* Hepatic disorders; hypothermia; pancreatitis; rhabdomyolysis; thrombocytopenia.

Drug Interactions:
Dose adjustments might be necessary if smoking started or stopped during treatment.

Monitoring: As per responsibilities section above.

Quetiapine:

SPC available at: https://www.medicines.org.uk/emc/product/4029/smpc
See BNF at: https://bnf.nice.org.uk/drug/quetiapine.html

Licensed Indications: Quetiapine is indicated for treatment of schizophrenia, for the treatment of moderate to severe manic episodes in bipolar disorder, for the treatment of major depressive episodes in bipolar disorder and for the prevention of recurrence of manic or depressed episodes in patients with bipolar disorder, who previously responded to quetiapine treatment. The modified-release tablets are additionally licensed as an add-on treatment of major depressive episodes in patients with Major Depressive Disorder (MDD) who have had sub-optimal response to antidepressant monotherapy.

Dose: Schizophrenia: Should be administered twice daily. Day 1 – 50mg daily, Day 2 – 100mg daily, Day 3 – 200mg daily, Day 4 300mg daily. From Day 4 onwards, the dose should be titrated to the usual effective dose of 400mg to 750mg daily.
Treatment of moderate to severe manic episodes in bipolar disorder: Should be administered twice daily. Day 1 – 100mg daily, Day 2 – 200mg daily, Day 3 – 300mg daily, Day 4 400mg daily. Further dosage adjustments up to 800mg daily by day 6 should be in increments of no greater than 200mg daily.
Treatment of major depressive episodes in bipolar disorder: Should be administered once daily at bedtime. Day 1 – 50mg daily, Day 2 – 100mg daily, Day 3 – 200mg daily, Day 4 300mg daily. The recommended daily dose is 300mg daily. Individual patients may benefit from a dose of 600mg daily but should only be initiated by a physician experienced in treating bipolar disorder. In individual patients, in the event of tolerance concerns, clinical trials have indicated that dose reduction to a minimum of 200mg could be considered.
For preventing recurrence in bipolar disorder: For preventing recurrence of manic, mixed or depressive episodes in bipolar disorder, patients who have responded to quetiapine for acute treatment of bipolar disorder should continue therapy at the same dose. The dose may be adjusted depending on clinical response and tolerability of the individual patient, within the range of 300 to 800mg/day administered twice daily. It is important that the lowest effective dose is used for maintenance therapy.
NB. The licensed titration schedules for MR tablets is different from the instant release tablets **(please see product SPC)**

For add-on treatment of majoy depressive episodes (modified release tablets only):- Administered prior to bedtime. The daily dose at the start of therapy is 50mg on Day 1 and 2, and 150mg on Day 3 and 4. Antidepressant effect was seen at 150 and 300mg/day in short-term trials as a add on therapy.

Preparations available:
Tablets – Generic 25mg, 100mg, 150mg, 200mg & 300mg.
Seroquel 25mg, 100mg, 200mg & 300mg.
Modified-release tablets – 50mg, 150mg, 200mg, 300mg & 400mg (Quetiapine MR should be prescribed as Biquelle® XL tablets, the brand of choice in Barnsley)
Liquid - Generic 20mg/ml. Instant release tablets should be first line as modified-release tables and liquid are significantly more expensive. For further information please see Quetiapine QIPP Detail Aid.

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: Hypersensitivity to the active substance and/or its excipients, concomitant administration of CYP P450 3A4 inhibitors, such as HIV-protease inhibitors, azole anti-fungal agents, erythromycin, clarithromycin and nefazodone, is contraindicated.

Cautions:
Treatment of depression in patients under 25 years due to the increased risk of suicide.
Use in caution in patients with cardiovascular disease, cerebrovascular disease or other conditions predisposing to hypotension or orthostatic hypotension, most likely at the start of treatment & could increase the risk of accidental injury, especially in the elderly.
Dysphagia has been reported with quetiapine. Quetiapine should be used with caution in patients at risk for aspiration pneumonia.
Constipation and intestinal obstruction (including fatalities) have been reported with quetiapine. Patients with intestinal obstruction/ileus should be managed with close monitoring and urgent care.
Caution may be needed when prescribing quetiapine to patients with a history of alcohol or drug abuse.
Sleep apnoea syndrome:
Cardiomyopathy & Myocarditis: causal relationship not established but reported in clinical trials and in post marketing reports. Treatment should be reassessed if develop on treatment.
Pancreatitis: reported in clinical trials and post marketing experience.

Side Effects: *Common or very common;* Appetite increased; asthenia; dysarthria; dyspepsia; dyspnoea; fever; headache; hyperglycaemia; irritability; palpitations; peripheral oedema; rhinitis; sleep disorders; suicidal behaviour (particularly on initiation); suicidal ideation (particularly on initiation); syncope; vision blurred; withdrawal syndrome. *Uncommon;* Anaemia; diabetes mellitus; dysphagia; hyponatraemia; hypothyroidism; sexual dysfunction; skin reactions; thrombocytopenia. *Rare or very rare*; Angioedema; breast swelling; gastrointestinal disorders; hepatic disorders; hypothermia; menstrual disorder; metabolic syndrome; pancreatitis; rhabdomyolysis; severe cutaneous adverse reactions (SCARs); SIADH.

Drug Interactions:
Concomitant administration of CYP P450 3A4 inhibitors, such as HIV-protease inhibitors, azole anti-fungal agents, erythromycin, clarithromycin and nefazodone. Grapefruit juice should be avoided, Lithium potentially increases the risk of neurotoxicity.

Monitoring: As per responsibilities section above.

Risperidone:

SPC available at: https://www.medicines.org.uk/emc/product/6857/smpc
See BNF at: https://bnf.nice.org.uk/drug/risperidone.html

Licensed Indications: treatment of Schizophrenia, treatment of moderate to severe manic episodes associated with bipolar disorder, for the short term treatment (up to 6 weeks) of persistent aggression in patients with moderate to severe Alzheimer's dementia unresponsive to non-pharmacological approaches and where there is a risk of harm to self or others,

Dose: Schizophrenia – Adults: may be given once or twice daily. Start on 2mg daily, dose can be increased on the 2nd day to 4mg daily. Most patients benefit from daily doses between 4mg to 6mg daily. Doses above 10mg daily have not demonstrated superior efficacy to lower doses and may increase the incidence of extrapyramidal symptoms. Safety of doses above 16mg daily have not been evaluated and therefore not recommended.
Elderly: a starting dose of 0.5mg twice daily. This dosage can be individually adjusted with 0.5 mg twice daily increments to 1 to 2 mg twice daily.
Manic episodes in bipolar disorders: - Adults: administer on a once daily schedule, starting with 2mg daily. Dose adjustments at a minimum interval of 24 hours should be in increments of 1mg daily. Can be administered in flexible doses between 1mg and 6mg daily to optimise each patient's level of efficacy and tolerability.
Elderly: a starting dose of 0.5mg twice daily. This dosage can be individually adjusted with 0.5 mg twice daily increments to 1 to 2 mg twice daily. Since clinical experience in the elderly is limited, caution should be exercised.
Persistent aggression in patients with moderate to severe Alzheimer's dementia: A starting dose of 0.25 mg twice daily is recommended. This dosage can be individually adjusted by increments of 0.25 mg twice daily, not more frequently than every other day, if needed. The optimum dose is 0.5 mg twice daily for most patients. Some patients, however, may benefit from doses up to 1 mg twice daily. Risperidone should not be used more than 6 weeks in patients with persistent aggression in Alzheimer's dementia. During treatment, patients must be evaluated frequently and regularly, and the need for continuing treatment reassessed.

Preparations available:
Tablets – Generic 0.5mg, 1mg, 2mg, 3mg, 4mg & 6mg.
Risperdal 0.5mg, 1mg, 2mg, 3mg, 4mg & 6mg.
Orodispersible tablet – generic 0.5mg, 1mg, 2mg, 3mg & 4mg.
Liquid – Generic 1mg/1ml oral solution sugar free.
Risperdal 1mg/1ml solution.

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This section should be read in conjunction with the "special warnings and precaution (general)", "side effects" and "drug interaction" (see above) and the product summary characteristics/BNF monograph.

Contraindications: hypersensitivity to the active substance and/or its excipients.

Cautions:
Risperidone should be avoided or used with caution in young females, patients under 25 years of age, patients with osteoporosis or patients with a history of hormone dependent breast cancer due to the risk to the long term risks associated with hyperprolactinaemia. Prolactin levels should be checked in all patients who become symptomatic.
Use with caution in patients with low blood pressure or at risk of orthostatic hypotension due to the alpha blocking activity of Risperidone
MHRA alert 2014: Intraoperative floppy eye syndrome (IFIS) during cataract surgery has been reported in patients taking risperidone. Primary care physicals should document the use of risperidone when making referral for cataract surgery.

Side effects: *Common or very common;* Anaemia; anxiety; appetite abnormal; asthenia; chest discomfort; conjunctivitis; cough; depression; diarrhoea; dyspnoea; epistaxis; fall; fever; gastrointestinal discomfort; headache; hyperglycaemia; hypertension; increased risk of infection; joint disorders; laryngeal pain; muscle spasms; nasal congestion; nausea; oedema; oral disorders; pain; sexual dysfunction; skin reactions; sleep disorders; urinary disorders; vision disorders; weight decreased, hyperprolactinaemia. *Uncommon;* Alopecia; breast abnormalities; cardiac conduction disorders; cerebrovascular insufficiency; chills; coma; concentration impaired; confusion; consciousness impaired; cystitis; diabetes mellitus; dry eye; dysarthria; dysphagia; dysphonia; ear pain; eye disorders; feeling abnormal; flushing; gait abnormal; gastrointestinal disorders; induration; malaise; menstrual cycle irregularities; mood altered; muscle weakness; palpitations; polydipsia; posture abnormal; procedural pain; respiratory disorders; sensation abnormal; syncope; taste altered; thirst; thrombocytopenia; tinnitus; vaginal discharge; vertigo. *Rare or very rare*; Angioedema; dandruff; diabetic ketoacidosis; eyelid crusting; glaucoma; hypoglycaemia; hypothermia; jaundice; pancreatitis; peripheral coldness; rhabdomyolysis; SIADH; sleep apnoea; water intoxication; withdrawal syndrome. *Frequency not known*; Cardiac arrest.
EPSE may occur or be more severe with higher doses of risperidone.

Drug interactions: see "drug interactions" above.
Concomitant use of Furosemide has been associated with a higher risk of mortality with co-use in elderly patients with dementia, caution is advised

Drug Monitoring: as per responsibilities section above.

Appendix C – Proforma for patients discharged from the mental health service

[Only to be considered after a minimum of 6 months if the patient is classed as stable in mental health]

The following patient is deemed suitable for discharge and therefore no longer needs to be reviewed by the mental health team.

Patient name:	DOB:
NHS number:	
Patient Address:	
Psychiatrist Name:	
Date Proforma Signed:	

The patient is prescribed the following medication and has been on a stable dose for the past 6 months:

Medication	Dosage

I am not aware of any clinically significant abnormal parameters directly related to anti-psychotic medication that would preclude use of the same ☐ Please tick to confirm

Please either attach latest relevant bloods from ICE or fill in the table below.

Parameter	Value	Date

If the GP has concerns about the patient's mental health or any queries:

- Please ring the number of the named psychiatrist's secretary before looking at re-referral if there are concerns about deteriorating mental state.
- Please inform secretary if aware of the emergence of new risks that may destabilise patient or any side effects that are of significant concern.
- If a decision is made by the psychiatrist that the patient needs to be seen, then this appointment will be prioritised and organised by the medical secretary or relevant mental health team.