

Physical health monitoring for patients taking oral and depot antipsychotic medication

Introduction

Life expectancy for adults with serious mental illness (SMI) is between 15 and 20 years less than for people in the general population. This may be because people with SMI often have physical health problems, including cardiovascular and metabolic disorders, such as type 2 diabetes. These conditions can be exacerbated by the use of antipsychotics.¹

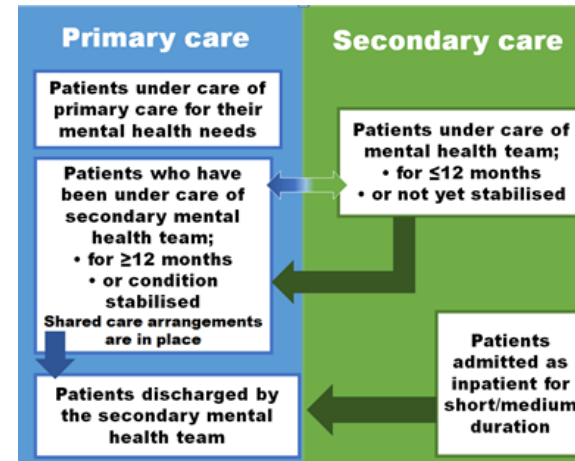
National Institute for Health and Care Excellence (NICE) Clinical Guidance CG 185 and CG 178 recommend that all adults with SMI should receive an annual physical health review to assess cardiovascular risk. Checks should be undertaken more frequently if:

1. Monitoring specific anti-psychotics or
2. Where a significant physical illness or risk of a physical illness has already been identified (NICE Clinical Guideline CG120).

Most antipsychotics, independent of other risk factors, have been associated with weight gain and a number of the second generation antipsychotics have been linked to hyperglycemia, impaired glucose tolerance, diabetic ketoacidosis and the development of diabetes.² This clinical resource supports primary and secondary care prescribers to ensure that physical health of patients with severe mental illness prescribed antipsychotic medication is monitored regularly. This will enable any necessary recommendations to improve self-care to be targeted early in treatment and will complement existing CQUINs and QOF targets in secondary and primary care.

1. Psychosis and schizophrenia in adults. Quality standard. National Institute for Health and Care Excellence. February 2015.
2. The Maudsley Prescribing Guidelines. 13th Edition.

Responsibilities of primary and secondary care teams in managing an individual's physical health (NHS RightCare)



For OUH inpatients, the Psychological Medicine Service should be contacted for advice regarding treatment.

Monitoring requirements

Key points:

- Following initiation of an antipsychotic, baseline and the first year of monitoring should be carried out by secondary care
- After one year, once the patient is stable, ongoing monitoring should be by primary care as part of the annual medication review. Monitoring should include blood pressure, weight, HbA1c and lipids
- Monitoring for depot medication is the same as for oral medication

The [Lester tool](#) highlights the requirements and rationale for physical health monitoring for adults with severe mental illness on antipsychotic medication.

Figure 1: Physical health monitoring requirements for antipsychotic medication

Physical health monitoring for patients prescribed antipsychotic medication (oral and depot/LAI)			
Test	Agreed monitoring	Secondary care monitoring	Primary care monitoring
ECG	Inpatients: ECG for ALL inpatients at baseline. Outpatients: ECG only if recommended in SPC (currently only haloperidol and pimozide) or if physical exam shows specific CV risk, or if personal history.	Baseline ECG and follow up if required in out patients.	Not required unless clinically indicated.
Weight	Inpatients: Baseline and then weekly for 6 weeks for all moderate (chlorpromazine, flupentixol, paliperidone, promazine, quetiapine, risperidone, and zuclopenthixol) & high risk (olanzapine and clozapine) antipsychotics, then every 2-4 weeks until week 12 and then at 6 months and annually. Outpatients: Baseline and then recommendation as above but advise the patient to weigh themselves & report weight gain.	Baseline and as described within the first year.	As part of annual review. If weight increases at annual review and patient is stable on antipsychotic, lifestyle and weight management should be encouraged rather than change medication.
Height	Baseline – one off only.	Baseline.	Baseline.
BMI	Calculate BMI if weight gain occurs.	Baseline and for the first year.	Baseline.
Pulse	Clozapine – see Oxford Health clozapine guideline. All other antipsychotics - baseline. Repeat only if clinically indicated.	Baseline for all antipsychotics and as per separate guidance for clozapine.	Clozapine is 'amber shared care' on the traffic light list. However, if a patient is not yet under a shared care arrangement and the clozapine is being prescribed in secondary care, it should be flagged on the GP systems as 'hospital prescribed'. This will enable any relevant adverse effects experienced by the patient to be linked to clozapine.
Blood pressure	Clozapine – see Oxford Health clozapine guideline. Other antipsychotics – baseline, and 12 weeks unless symptomatic for hypotension or hypertension as required according to need.	Baseline, 12 weeks and one year (clozapine - as per guidelines).	As part of annual review.
Glycosylated haemoglobin (HbA1c)	Clozapine and olanzapine: baseline, at 12 weeks, 1 year and then annually. All other antipsychotics: baseline, at 12 weeks, 1 year and then periodically with a minimum frequency of every 5 years– refer to appropriate guidelines if glucose levels raised.	Baseline, 12 weeks and at 1 year for all antipsychotics. Annually for clozapine, if not transferred to shared care.	For olanzapine and shared care clozapine patients as part of annual review. For all other antipsychotics periodically with a minimum frequency of every 5 years. Patients should be aligned to existing diabetes and pre-diabetes pathways where appropriate. If HBA1c raised, advice can be

			sought from the link care co-ordinator or psychiatrist on whether a change in medication is required.
Full Blood Count	Clozapine - see Oxford Health clozapine guideline. All other antipsychotics - baseline. Repeat only if clinically indicated.	Monitoring for clozapine as per OH guideline. All other antipsychotics - baseline. Repeat only if clinically indicated.	Monitoring for shared care clozapine patients as per guideline. All other antipsychotics – only if clinically indicated.
Blood lipid profile	Baseline and at 12 weeks. Annual checks – only needed if treated with a statin.	Baseline and at 12 weeks. Annually for clozapine, if not transferred to shared care.	For olanzapine and shared care clozapine patients as part of annual review. For all other antipsychotics, annual checks only needed if treated with a statin or if BMI increased >30.
Prolactin levels	Baseline for high risk drugs only (risperidone, paliperidone, amisulpride, sulpiride and all typical antipsychotics). Refer to Oxford Health antipsychotic-induced hyperprolactinaemia guideline for guidance on when to repeat prolactin measurements.	Baseline for high risk antipsychotics only. Follow OH antipsychotic-induced hyperprolactinaemia guideline for further monitoring recommendations.	Only if patient presents with symptoms of hyperprolactinaemia. Consult OH antipsychotic-induced hyperprolactinaemia guideline as necessary.
Extrapyramidal symptoms	At each review.	To be monitored at each review.	Akathisia should NEVER be treated with anticholinergic medication such as procyclidine. Review and treatment would be by secondary care. Advice can be sought from the link care co-ordinator or psychiatrist.
Lifestyle	Baseline and at each review– especially if clinician is aware that patient is stopping smoking.	Lifestyle advice to be given at the start of treatment including smoking cessation and weight management advice.	Lifestyle advice should be reinforced at each review.
Temperature	Clozapine – see Oxford Health clozapine guideline. All other antipsychotics - not routinely monitored.	To be aware, likely to be admitted if neutropenic sepsis suspected. High temperature may be an early sign of neuroleptic malignant syndrome or myocarditis.	To be aware, likely to be admitted if neutropenic sepsis suspected. High temperature may be an early sign of neuroleptic malignant syndrome or myocarditis.

Figure 2: Management of common side-effects in primary care

Side effect	Details and management
Postural hypotension	Usually only associated with start of treatment or during titration and resolves with continued use. Advise not standing too quickly and not driving if dizzy. Reduce the dose or slow the titration speed if necessary.
Akathisia	Anticholinergics do not help. An antipsychotic dose reduction may help, or consider switching to a lower risk antipsychotic if symptoms persist.
Parkinsonian-like symptoms	Reduce the dose if appropriate, or treat with an anticholinergic (e.g. procyclidine), or consider switching to a lower risk antipsychotic.
Sedation/drowsiness/somnolence	Usually more of a problem at the start of treatment and often resolves, however it may persist. Manipulate the dose if possible (take the dose at night if once daily, or take a larger dose at night if twice daily). If it persists, consider whether a dose reduction is possible or switch if appropriate.
Weight gain	Diet and exercise. Consider switching to a lower risk antipsychotic if appropriate.
Constipation	Increase fibre, fluid, and exercise. Consider a laxative. Review, and stop if possible, any other strongly anticholinergic medicines. Be aware that clozapine can also rarely cause paralytic ileus so prompt treatment of all patients on clozapine presenting with constipation is important.
Dry mouth	Suck sugar-free boiled sweets or chew sugar free gum. A mouth spray may be necessary in severe cases. Remind about the importance of good oral hygiene.
Hypersalivation	Can occur with other antipsychotics, but more commonly associated with clozapine. Reduce the dose if possible or consider treating with an anticholinergic e.g. hyoscine. See OH MI bulletin for further information and treatment options.

Flagging clozapine prescribing

Clozapine initiation (titration, monitoring and stabilisation) is carried out in secondary care. For patients meeting the required criteria, care can then be shared (see Oxfordshire's [clozapine shared care protocol](#) (under review)) and they will continue to receive ongoing prescribing and monitoring of their clozapine in primary care.

For patients not treated under shared care arrangements who continue to be treated and monitored in secondary care it is important that the prescribing of clozapine is flagged on the GP's patient record. This can be done by adding clozapine to the medication record as 'hospital prescribed'. This will enable primary care prescribers to recognise and relate any clozapine specific adverse effects and drug-drug interactions.

Oxford Health contact for additional advice

Primary care prescribers can contact the Oxford Health Medicines Advice Service on 01865 904365 or email: medicines.advice@oxfordhealth.nhs.uk
OUH prescribers should contact the Psychological Medicine Service on 01865 223153.

Related information

[Primary Care Service for the Provision of Improving Physical Health in Patients with a Severe Mental Illness](#)

Shared Care Protocols (including Lithium and Clozapine) available [here](#)