

NOTTINGHAMSHIRE AREA PRESCRIBING COMMITTEE SHARED CARE PROTOCOL AGREEMENT

MANAGEMENT OF PARKINSON'S DISEASE (PD) WITH APOMORPHINE (AMBER 1)

This shared care agreement covers adult patients with Parkinson's Disease under the care of Neurologists and consultants in Health Care of Older People.

OBJECTIVES

- Provide summary of information on apomorphine therapy for Parkinson's disease to primary care prescribers.
- Define referral procedures between hospital and Primary care for initiation of treatment, dose adjustment, identification and management of complications.

REFERRAL CRITERIA

- Prescribing responsibility will only be transferred when the patient has undergone a test dose in a specialist clinic to establish efficacy and tolerability of the medicine.
- Infusion: The patient will normally have been on the intermittent injections already. Those moving to the infusion due to high use of the intermittent injection will have the infusion initiated and titrated in the patient's home. The specialist will provide the first prescription to ensure the patient is set up on the infusion.

PROCESS FOR TRANSFERRING PRESCRIBING TO PRIMARY CARE

- The request for shared care should include individual patient information, outlining all relevant aspects of the patient's care and including direction to the information sheets at <https://www.notsapc.nhs.uk/shared-care/>.
- If the GP does not agree to share care for the patient, he/she will inform the Specialist of his/her decision in writing within 14 days.
- In cases where shared care arrangements are not in place, or where problems have arisen within the agreement and patient care may be affected, the responsibility for the patient's management, including prescribing reverts to the specialist.

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Last reviewed: July 2023

Review date: July 2026

CONDITION TO BE TREATED

Unlike the pulsed release of insulin from the pancreas, the production of dopamine in the brain is near-constant throughout 24 hours. The principal aim of treatment in Parkinson's disease (PD) is therefore to provide a near-constant supply of dopamine or a dopamine agonist to the brain.

The majority of patients are treated with a dopamine agonist first - either ropinirole, pramipexole or rotigotine. Ropinirole and pramipexole are available in prolonged release formulations and rotigotine is a patch. All usually give quite smooth symptom control, but all three can cause significant side effects including compulsive/addictive behaviours such as gambling, compulsive shopping and hypersexuality (which patients rarely recognise as side effects and do not report unless specifically asked).

Within 1-5 years most patients also need to take a levodopa preparation (Madopar (co-beneldopa) or Sinemet (co-careldopa)). They may also require supplementary drugs to try and smooth out the delivery of levodopa to the brain (using a Catechol-O-Methyltransferase [COMT] inhibitor such as entacapone, which is also available in a combined tablet with levodopa called Sastravi[®] or Stanek[®] or Stalevo[®] (Stalevo[®] is less cost effective than other brands)) or to reduce the breakdown of dopamine within the brain [using MAO-B inhibitors such as selegiline or rasagiline]. At night-time patients may need slow-release levodopa preparations and in the morning, they may need dispersible madopar which releases levodopa more quickly. They may need to time when they take levodopa preparations so as to avoid meals with a heavy protein load. If they develop involuntary movements (dyskinesias) these may respond to amantadine or to changes in the size and timing of their levodopa doses.

Common additional problems include dementia (which usually merits a referral to old age psychiatry) and various sleep disorders (some of which respond to clonazepam or melatonin).

Apomorphine is used either as an intermittent injection to rescue patients from unpredictable off periods (when they cannot move) or as a continuous infusion to try and restore smooth brain agonist levels and hence smooth symptom control when all other approaches have failed. In select patients, deep brain stimulation (via electrodes in the subthalamic nucleus) may obviate the need for high doses of drugs in patients with advanced disease, again restoring some degree of therapeutic calm.

Decisions about which drug(s) should be used, and when, will usually be made in Secondary care, with advice to Primary care on reasonable dose adjustments that may be necessary between hospital visits. In line with NICE guidelines, Parkinson's disease patients who are able and willing to attend outpatient clinics will not be discharged from Secondary care.

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NATIONAL/ LOCAL GUIDANCE

NICE published a clinical guideline in 2017 on the diagnosis and management of Parkinson's disease in adults.

CLINICAL INFORMATION

See Information Sheet for Primary Care Prescribers.

AREAS OF RESPONSIBILITY *(include any other medicine specific responsibilities)*

Specialist's Roles and Responsibilities

1. The specialist will confirm the working diagnosis.
2. The specialist will recommend and initiate the treatment.
3. Investigations prior to starting therapy (haematological testing (full blood count, reticulocyte count and Coombs test) will be carried out in Secondary care prior to and following initiation of apomorphine as appropriate.
4. The specialist will ensure that the patient has an adequate supply of medication (usually 28 days) until shared care arrangements are in place. Further prescriptions will be issued if, for unseen reasons, arrangements for shared care are not in place at the end of 28 days. Patients should not be put in a position where they are unsure where to obtain supplies of their medication.
5. If shared care is considered appropriate for the patient, and the patient's treatment and condition are stable, the specialist will contact the GP.
6. The specialist will provide the patient's GP with the following information:
 - diagnosis of the patient's condition with the relevant clinical details.
 - details of the patient's treatment to date
 - details of treatments to be undertaken by GP*
 - details of other treatments being received by the patient that are not included in shared care
 - details of monitoring arrangements

*Including reasons for choice of treatment, drug or drug combination, frequency of treatment, number of months of treatment to be given before review by the consultant.
7. Whenever the specialist sees the patient, he/she will
 - send a written summary within 14 days to the patient's GP.
 - record test results on the patient-held monitoring booklet if applicable
 - communicate any dosage changes made to the patient
8. The specialist team will be able to provide training for Primary care prescribers if necessary to support the shared care agreement.
9. Contact details for Primary care prescribers during working and non-working hours will be made available
10. Details for fast-track referral back to Secondary care will be supplied.

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11. The specialist will provide the patient with details of their treatment, follow-up appointments, monitoring requirements and nurse specialist contact details.
12. All patients on dopamine agonists for Parkinson's disease and similar conditions will remain under specialist review (typically 4-6 monthly) and will have contact details for the clinical nurse specialists.
13. The specialist will ensure that the patient is monitored as outlined in the information sheet(s) and will liaise with the GP should, any additional monitoring be required.

Primary Care Prescriber's Roles and Responsibilities

The GP will be responsible for:

1. Ensuring that he/she has the information and knowledge to understand the therapeutic issues relating to the patient's clinical condition.
2. Undergoing any additional training necessary in order to carry out a practice -based service.
3. Agreeing that in his / her opinion the patient should receive shared care for the diagnosed condition unless good reasons exist for the management to remain within Secondary care.
4. If the GP does not agree to shared care for the patient, then he/ she will inform the Specialist of his/her decision in writing within 14 days.
5. Prescribing the maintenance therapy in accordance with the written instructions contained within the GP information sheets and communicating any changes of dosage made in Primary care to the patient. It is the responsibility of the prescriber who makes a dose change to communicate this to the patient.
6. Where applicable, keep the patient-held monitoring booklet up to date with the results of investigations changes in dose and alterations in management and take any actions necessary. It is the responsibility of the clinician actioning the results from monitoring, in accordance with this shared care guideline, and thereby prescribing for the patient to complete the patients record with the necessary information.
7. Reporting any adverse effect in the treatment of the patient to the consultant.
8. The GP will ensure that the patient is given the appropriate appointments for follow- up and monitoring, and that defaulters from follow-up are contacted to arrange alternative appointments. It is the GPs responsibility to decide whether to continue treatment with a patient who does not attend appointments required for follow -up and monitoring.

A patient information leaflet is available from [Parkinson's UK](#).

APO-go / Dacepton nurse role and responsibilities

1. Carry out response test for apomorphine under guidance from specialists for starting new patients
2. Inform the GP and specialist team (consultant, PDNS and community PDNS) promptly (within 48 hours) of changes in treatment or dose. APO-go/ Dacepton nurse will be working within written titration guidance of hospital specialist team.
3. Any adverse effects and action taken should also be made available promptly to the GP and the specialist team.
4. Have a mechanism in place to deal with mechanical failure of an apomorphine pump (Britannia 24-hour hotline: 08081964242 Dacepton 24-hour support line on 0800 254 0175)

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5. Conduct regular patient reviews.
6. Provide device training for patients, carers, and allied healthcare professionals
7. Work with specialists to identify and support patients to transfer from the pre-filled syringes to the APO-go POD cartridge or apomorphine infusion.

CONTACT DETAILS

Nottingham University Hospitals NHS Trust

In hours:

Health Professionals to contact:

Dr Sare on 0115 9249924 extension 81792

Dr Evans 01159249924 extension 81735

Patients to contact:

Parkinson's Disease Nurse Specialists on 0115 9249924 extension 83439

Out of hours:

Health Professionals to contact: Neurology SpR on-call via 0115 9249924

Patients to contact: APO-go Helpline on 0844 880 1327 or Dacepton support line on 0800 254 0175

Sherwood Forest Hospitals NHS Foundation Trust

In hours:

Health Professionals to contact:

Dr Silva on 01623 622515 extension 2418

Or

Parkinson's Disease Nurse Specialists on 01623 622515 extension 5127

Patients to contact:

Parkinson's Disease Nurse Specialists on 01623 622515 extension 5127

Or

APO-go Helpline on 0844 880 1327

Dacepton Helpline on 0800 254 0175

Out of hours:

Contact APO-go Helpline on 0844 880 1327 or

Dacepton support line on 0800 254 0175

REFERENCES

NICE Guideline 71: Parkinson's disease in adults.

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Version Control- Management Of Parkinson's Disease (PD) With Apomorphine – Shared Care Protocol Agreement			
Version	Author(s)	Date	Changes
5.0	<p>Vimbayi Mushayi – Specialist Interface and Medicine Optimisation Pharmacist</p> <p>In consultation with Dr N Silva, Consultant Neurologist Sherwood Forest Hospitals NHS Foundation Trust</p> <p>Clair Mace, Parkinson's Disease Specialist Nurse Nottingham University Hospital NHS Trust</p>	July 2023	<ul style="list-style-type: none"> Added standard header and version control Removed footer Added roles and responsibilities of Apo-go/ Dacepton nurse Specialist to provide first prescription when switching from intermittent injection to infusion. StaneK added as a preferred brand option and information on Stalevo being less cost effective than other brands)

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