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. As such, the GP
will be requested to prescribe the first prescription for this preparation.

PROCESS FOR TRANSFERRING PRESCRIBING TO PRIMARY CARE
- The request for shared care should include individual patient information,
outlining all relevant aspects of the patients care and which includes direction to
the information sheets at www.nottsapc.nhs.uk.
- If the GP does not agree to share care for the patient then 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 back to
the specialist.

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 Stalevo or Sastravi) 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 can't 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.

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 for during working and non-working hours will be made available

10. Details for fast track referral back to secondary care will be supplied.

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 that 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 acting 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 in a patient who does not attend appointments required for follow up and monitoring

REFERENCES

AUTHORS
Gillian Sare, Consultant Neurologist
Lynne Kennell, Interface Pharmacist
Reviewed 2018
Emma Grace, Lead Pharmacist HCOP

CONTACT DETAILS
Nottingham University Hospitals NHS Trust

In hours:
Health Professionals to contact:
Dr Sawle / Dr Sare / Dr Evans on 0115 9249924 extension 61792

Patients to contact:
Parkinson’s Disease Nurse Specialists on 0115 9249924 extension 63439

Out of hours:
Health Professionals to contact: Neurology SpR on-call via 0115 9249924
Patients to contact: APO-go Helpline on 0844 880 1327

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

Out of hours:
Contact APO-go Helpline on 0844 880 1327