Visual summary

Managing symptoms of Parkinson's disease (PD)

Ongoing care and support

Specialist nursing
People with PD should have regular access to the services provided by a PD nurse specialist

Physiotherapy
Offer PD-specific physiotherapy for people who are experiencing:
- Balance problems
- Motor function problems

Occupational therapy
Offer PD-specific occupational therapy for people who are having:
- Difficulties with daily living activities

Speech and language
Offer speech and language therapy for people with PD who are experiencing:
- Communication problems
- Problems with swallowing or saliva

Palliative care
Consider referring people at any stage of PD to the palliative care team to discuss their priorities for care at the end of life

Managing non-motor symptoms

While the non-pharmacological management strategies listed above are first line treatments for non-motor symptoms, consider treating refractory problems with the following drugs:

⚠ Consider whether new symptoms might be caused by side effects of other medications

Excessive daytime sleepiness
- Modafinil

REM* sleep behaviour disorder
- Clonazepam / Melatonin

Nocturnal akinesia
- Levodopa / Oral dopamine agonists
  - if neither is effective → Rotigotine

Orthostatic hypotension
- Midodrine
  - If contraindicated, not tolerated or not effective → Fludrocortisone

Hallucinations and delusions
Do not treat if well tolerated
- Quetiapine
  - If not effective → Clozapine
  - For people without cognitive impairment

⚠ Lower doses needed for people with PD than in other indications

~~Olanzapine~~ Do not offer olanzapine

Drooling
- Glycopyrronium bromide
  - If contraindicated, not tolerated or not effective → Specialist referral for Botulinum toxin A
  - If person's risk of cognitive adverse effects is minimal → Other anticholinergic medicines

Dementia

Mild–moderate	Severe
Offer	Consider

Cholinesterase inhibitor
- If not tolerated or contraindicated → Memantine

Managing motor symptoms

★★★ More improvement / fewer adverse events
★★☆ Intermediate
★☆☆ Less improvement / more adverse events

If symptoms affect daily life, offer levodopa

If symptoms do not affect daily life, offer a choice

Levodopa		Dopamine agonists		MAO-B inhibitors	
Symptoms	★★★	Symptoms	★★☆	Symptoms	★☆☆
Activities	★★★	Activities	★☆☆	Activities	★☆☆
Motor comp.	★☆☆	Motor comp.	★★★	Motor comp.	★★★
Adv. Evts.	★★★	Adv. Evts.	★☆☆	Adv. Evts.	★★★

Adjuvant therapy
If dyskinesia or motor fluctuations develop, adjuvant therapy may be added to a Levodopa regimen, under specialist advice.

+ Dopamine agonists		+ MAO-B inhibitors		+ COMT inhibitors	
Symptoms	★★☆	Symptoms	★★☆	Symptoms	★★☆
Activities	★★☆	Activities	★★☆	Activities	★★☆
Off-time	★★★	Off-time	★★☆	Off-time	★★☆
Adv. Evts.	★★☆	Adv. Evts.	★★★	Adv. Evts.	★☆☆
Hallucinat.	★☆☆	Hallucinat.	★★★	Hallucinat.	★★★

If dyskinesia is not adequately managed by the above, consider amantadine.

+ **Amantadine** (no evidence of benefit or harms)

⚠ **Impulse control disorders (ICDs)**

ICDs are common adverse effects of dopaminergic therapy. They are a group of psychiatric conditions linked by a failure to resist the temptation to perform an act harmful to either oneself or others

Ensure patients and carers are aware of ICD types
- Compulsive gambling
- Hypersexuality
- Binge eating
- Obsessive shopping

Also inform them who to contact if ICDs develop

Managing ICDs
- Adjust dopaminergic therapy gradually, to balance motor symptoms and ICDs
  - If not effective → Offer specialist CBT targeted at ICDs

Advanced Parkinson's disease

Offer best medical therapy, which may include: Intermittent apomorphine injection and/or Continuous subcutaneous apomorphine infusion

if symptoms are not adequately controlled → Consider deep brain stimulation

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