Audit team
Dr Dipen Gandechha, Specialty Doctor
Claire Andrew, Parkinson’s Disease Practitioner
Dr William Wareing, Registrar
Victoria Peers, Clinical Audit Officer
The National Parkinson’s Audit has been running since 2009 with the aim of enabling Parkinson’s services across the UK to measure their practices against the NICE Parkinson’s Guidelines (2006).

The audit focuses on management of the condition.

We participated in the previous 2011 audit and need to assess if there have been any improvements in the management of Parkinson’s disease within the Trust.
Aims

- Audit compliance of local Parkinson’s service against Parkinson’s guidelines using a simple peer-reviewed tool.

- Highlight areas of good and poor practice-discussions leading to action plans to improve quality of care.

- Baseline audit data allows:
  - national mapping of post code variation in quality of care
  - progress in service provision and patient care through participation in continuing audit cycle.
Methodology

- Minimum audit sample size 20 consecutive Parkinson’s patients during the period April-September 2015.
- Audit data entered from medical notes entered directly onto spreadsheet.
- Separate record for every patient with Parkinson’s
- Patient identification details removed prior to submission
- Information obtained for total of 20 consecutive cases.
- Complete spreadsheets and service description submitted to Parkinson’s UK.
Audit Results (N=20)
Demographics: Gender

2011 Audit (N30)
- Male: 33%
- Female: 67%

2015 Audit (N20)
- Male: 55%
- Female: 45%
2011 Audit (N30)
Range 41-85yrs, median 70yrs

2015 Audit (N20)
Range 59-88yrs, median 71yrs

Patient living alone = 8 (40%)
Parkinson’s Phase

2011 Audit (N30)
- Diagnosis: 13%
- Maintenance: 50%
- Complex: 37%

2015 Audit (N20)
- Diagnosis: 13%
- Maintenance: 75%
- Complex: 25%
**Specialist Review**

*Standard A: 100% of people with Parkinson’s must be reviewed at 6-12 monthly intervals.*

*(Parkinson’s NICE:R12, R77; NSF LTC:QR2; Scotland: Clinical Standard 19.3).*

<table>
<thead>
<tr>
<th>Specialist Review</th>
<th>Total Yes (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current Audit (N20)</td>
</tr>
<tr>
<td>Has the patient been reviewed by a specialist within the past year? i.e. by doctor or nurse specialist?</td>
<td>20 (100%)</td>
</tr>
<tr>
<td>Most recent medical review within 6 months?</td>
<td>20 (100%)</td>
</tr>
<tr>
<td>Evidence of medicines reconciliation?</td>
<td>20 (100%)</td>
</tr>
</tbody>
</table>
New/recent Parkinson’s medication

Standard B: 100% of people with Parkinson’s should be provided with both oral and written communication throughout the course of the disease, which should be individually tailored and reinforced as necessary. (Parkinson’s NICE R3; Scotland - Clinical Standards 1.3 & 1.4).

• Evidence of a documented conversation with the patient/carer and/or provision of written information regarding potential adverse effects for any new medications?
  • Yes = 15 (88%) (Previous audit 40%)
  • No = 2 (12%)
  • N/A* = 3

*Patient not started on Parkinson's medication for the first time during the previous year

N=20
### Monitoring of Adverse Effects

<table>
<thead>
<tr>
<th>Monitoring of Adverse Effects</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the patient on Parkinson's medication?</td>
<td>20 (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there any evidence of enquiry into excessive daytime sleepiness?</td>
<td>8 (40%)</td>
<td>12 (60%)</td>
<td></td>
</tr>
<tr>
<td>If excessive daytime sleepiness present and the patient is a driver, was the impact on driving discussed and advice given?</td>
<td>5 (63%)</td>
<td>3 (37%)</td>
<td>12</td>
</tr>
</tbody>
</table>

**Standard C: 100% of people with Parkinson’s who have sudden onset of sleep should be advised not to drive and to consider any occupational hazards** *(Parkinson’s NICE R72)*

- Yes: 97%
- No: 40%
- N/A: 25%

N=20
### Monitoring of adverse effects

**Standard D:** 100% of patients on dopaminergic therapies are monitored for impulse control behaviours including dopamine dysregulation syndrome (Parkinson’s NICE R 54, SIGN 5.1.1)

**Standard E:** If an ergot-derived dopamine agonist is used, 100% of patients should have a minimum of renal function tests, erythrocyte sedimentation rate (ESR) and chest radiograph (CXR) performed before starting treatment, and annually thereafter (Parkinson’s NICE R30 and 40, SIGN 5.1.2)

<table>
<thead>
<tr>
<th>Monitoring of Adverse Effects</th>
<th>Yes</th>
<th>No</th>
<th>Not on drug - N/A</th>
<th>2011 Audit % Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence patients taking dopaminergic drugs are monitored re: compulsive behaviour</td>
<td>10 (67%)</td>
<td>5 (33%)</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Evidence patients taking dopamine agonists are monitored re: compulsive behaviour</td>
<td>8 (80%)</td>
<td>2 (20%)</td>
<td>10</td>
<td>54%</td>
</tr>
<tr>
<td>Evidence of patients taking ergot dopamine agonists having an echocardiogram carried out for fibrosis related adverse effects</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>-</td>
</tr>
</tbody>
</table>

N=20
## Advanced Care Planning

### Standard F: For 100% of people with Parkinson’s end of life care requirements should be considered throughout all phases of the disease.

*Parkinson’s NICE R82*

### Standard G: 100% of people with Parkinson’s and their carers should be given the opportunity to discuss end-of-life issues with appropriate healthcare professionals.

*Parkinson’s NICE R83*

<table>
<thead>
<tr>
<th>Advanced Care Planning</th>
<th>Yes</th>
<th>No</th>
<th>N/A i.e. no markers of adv disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there markers of advanced disease? e.g. dementia, increasing frailty, impaired swallowing, nursing home level of care required?</td>
<td>3 (15%)</td>
<td>17 (85%)</td>
<td>-</td>
</tr>
<tr>
<td>Are there any documented discussions regarding end of life care issues/care plans?</td>
<td>-</td>
<td>3 (100%)</td>
<td>17</td>
</tr>
<tr>
<td>Is there evidence the patient/carer has been offered information about, or has set up a Lasting Power of Attorney?</td>
<td>-</td>
<td>3 (100%)</td>
<td>17</td>
</tr>
</tbody>
</table>

N=20
Parkinson’s Assessment & Care Planning Scores
## Domain 1: Non-motor assessments during the previous year

<table>
<thead>
<tr>
<th></th>
<th>1- Blood pressure documented lying (or sitting) and standing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2- Enquiry/assessment re cognitive status</td>
</tr>
<tr>
<td></td>
<td>3- Enquiry re hallucinations/psychosis</td>
</tr>
<tr>
<td></td>
<td>4- Enquiry- mood</td>
</tr>
<tr>
<td></td>
<td>5- Enquiry- communication difficulties</td>
</tr>
<tr>
<td></td>
<td>6- Enquiry- problems with swallowing function</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>7- Evidence of screening for malnutrition (weight)</td>
</tr>
<tr>
<td></td>
<td>8- Enquiry- problems with saliva</td>
</tr>
<tr>
<td></td>
<td>9- Enquiry- bowel function</td>
</tr>
<tr>
<td></td>
<td>10- Enquiry- bladder function</td>
</tr>
<tr>
<td></td>
<td>11- Enquiry- pain</td>
</tr>
<tr>
<td></td>
<td>12- Enquiry- sleep quality</td>
</tr>
</tbody>
</table>
Non-motor assessments: part 1

- BP documented: 100% in both audits
- Cognitive status: 70% in 2011, 95% in 2015
- Hallucinations/psychosis: 53% in 2011, 95% in 2015
- Mood: 70% in 2011, 95% in 2015
- Communication difficulties: 33% in 2011, 65% in 2015
- Problems with swallowing function: 53% in 2011, 75% in 2015
Non-motor assessments: part 2

- **Screening for malnutrition**: 100% (2011 Audit), 100% (2015 Audit)
- **Problems with saliva**: 33% (2011 Audit), 55% (2015 Audit)
- **Bowel function**: 67% (2011 Audit), 85% (2015 Audit)
- **Bladder function**: 73% (2011 Audit), 80% (2015 Audit)
- **Pain**: 53% (2011 Audit), 65% (2015 Audit)
- **Sleep quality**: 67% (2011 Audit), 95% (2015 Audit)
Domain 2: Motor and ADL assessment during the previous year

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Evidence enquiry re “On/Off” fluctuations</td>
</tr>
<tr>
<td>2</td>
<td>Enquiry/assessment of problems with gait including freezing</td>
</tr>
<tr>
<td>3</td>
<td>Enquiry- Falls and balance</td>
</tr>
<tr>
<td>4</td>
<td>Fracture risk/osteoporosis considered</td>
</tr>
<tr>
<td>5</td>
<td>Problems with bed mobility</td>
</tr>
<tr>
<td>6</td>
<td>Problem with transfers</td>
</tr>
<tr>
<td>7</td>
<td>Enquiry/assessment- tremor</td>
</tr>
<tr>
<td>8</td>
<td>Problems with dressing</td>
</tr>
<tr>
<td>9</td>
<td>Problems with hygiene, washing etc</td>
</tr>
<tr>
<td>10</td>
<td>Difficulties eating and drinking</td>
</tr>
<tr>
<td>11</td>
<td>Domestic activities e.g. shopping</td>
</tr>
<tr>
<td>12</td>
<td>Problems with function at work</td>
</tr>
</tbody>
</table>
Motor and ADL assessments: part 1

<table>
<thead>
<tr>
<th>Condition</th>
<th>2011 Audit (N30)</th>
<th>2015 Audit (N20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;On/Off&quot; fluctuations</td>
<td>50</td>
<td>80</td>
</tr>
<tr>
<td>Assessment of gait</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Falls and balance</td>
<td>70</td>
<td>83</td>
</tr>
<tr>
<td>Fracture risk/osteoporosis</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Bed mobility</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>Problems with transfers</td>
<td>53</td>
<td>60</td>
</tr>
</tbody>
</table>

% Yes
Domain 2 Total Score 11 or 12/12 = 9 (45%)  
(Previous Audit 36%)
**Domain 3: Education & multi-disciplinary involvement during the previous year**

1. Referral/input from Parkinson's nurse
2. Physiotherapy referral, input and assessment
3. OT referral, input and assessment
4. SLT referral/input for communication
5. SLT referral/input for swallowing
6. Social work referral/input
7. Patient's and carer's entitlement to financial benefits has been considered
8. Patient and/or carer has been signposted to Parkinson's UK
9. Patient and/or carer has been signposted to Information Support Worker
10. Communication with carers about entitlement to carer assessment and support services
Education & MDT involvement: part 1

- Referral/input from Parkinson's nurse: 90% (2011 Audit) vs. 95% (2015 Audit)
- Physiotherapy referral/assessment/input: 86% (2011 Audit) vs. 87% (2015 Audit)
- OT referral/assessment/input: 50% (2011 Audit) vs. 83% (2015 Audit)
- SLT referral/input for communication: 12% (2011 Audit) vs. 21% (2015 Audit)
- SLT referral/input for swallowing: 16% (2011 Audit) vs. 22% (2015 Audit)

% Yes

Education & MDT involvement: part 1

- Referral/input from Parkinson's nurse: 90% (2011 Audit) vs. 95% (2015 Audit)
- Physiotherapy referral/assessment/input: 86% (2011 Audit) vs. 87% (2015 Audit)
- OT referral/assessment/input: 50% (2011 Audit) vs. 83% (2015 Audit)
- SLT referral/input for communication: 12% (2011 Audit) vs. 21% (2015 Audit)
- SLT referral/input for swallowing: 16% (2011 Audit) vs. 22% (2015 Audit)

% Yes

Education & MDT involvement: part 1

- Referral/input from Parkinson's nurse: 90% (2011 Audit) vs. 95% (2015 Audit)
- Physiotherapy referral/assessment/input: 86% (2011 Audit) vs. 87% (2015 Audit)
- OT referral/assessment/input: 50% (2011 Audit) vs. 83% (2015 Audit)
- SLT referral/input for communication: 12% (2011 Audit) vs. 21% (2015 Audit)
- SLT referral/input for swallowing: 16% (2011 Audit) vs. 22% (2015 Audit)

% Yes

Education & MDT involvement: part 1

- Referral/input from Parkinson's nurse: 90% (2011 Audit) vs. 95% (2015 Audit)
- Physiotherapy referral/assessment/input: 86% (2011 Audit) vs. 87% (2015 Audit)
- OT referral/assessment/input: 50% (2011 Audit) vs. 83% (2015 Audit)
- SLT referral/input for communication: 12% (2011 Audit) vs. 21% (2015 Audit)
- SLT referral/input for swallowing: 16% (2011 Audit) vs. 22% (2015 Audit)

% Yes
Education & MDT involvement: part 2

- Social work referral/input (n4)
  - 2011 Audit (N30): 50%
  - 2015 Audit (N20): 60%
- Entitlement to financial benefits considered (n7)
  - 2011 Audit (N30): 14%
  - 2015 Audit (N20): 60%
- Patient/carer signposted to Parkinson's UK
  - 2011 Audit (N30): 47%
  - 2015 Audit (N20): 65%
- Signposted to Information Support Worker
  - 2011 Audit (N30): 0%
  - 2015 Audit (N20): 40%
- Entitlement to support/assessment (n6)
  - 2011 Audit (N30): 0%
  - 2015 Audit (N20): 17%

Domain 3 Total Score 9 or 10/10 = 9 (45%) (Previous Audit 0%)
Summary

- Significant improvement across all domains for motor and non-motor symptoms of PD
- Small sample size may exaggerate percentages
- Improvement needed regarding focus on fracture risk and osteoporosis screening
- OT referral rates low but may be masked by Allen Day physio referrals receiving both OT and physio input
- Improvements needed in signposting towards PD support worker
Recommendations

- Review pack re advanced care planning.
  - Leaflet recently produced by PD UK

- Provide contact details for PD UK information support worker to new SpRs and include in patient information pack

- More active consideration of advanced care planning when appropriate.

- Look at SALT support available.
  - Service provision reviewed re Lee Silverman Voice Technique

- Review Parkinson’s assessment clinic questionnaires.

- Cognitive screening: feasibility of incorporating MOCA into nursing assessment at clinic attendance.
References


- [http://www.parkinsons.org.uk/](http://www.parkinsons.org.uk/)

- [https://www.nice.org.uk/guidance/cg035](https://www.nice.org.uk/guidance/cg035)
Thank you!

Any Questions?