

# Building a holistic service for patients with Parkinson's Disease and psychiatric symptoms

E Tullo,<sup>1,2</sup> S Henry<sup>1</sup>

1. Northumbria Healthcare NHS Foundation Trust 2. Sunderland Medical School

## Background: Parkinson's Disease and Mental Health

Parkinson's Disease (PD) is typically recognised by the motor symptoms of tremor, rigidity and bradykinesia. However, the prevalence of psychiatric symptoms is common:

- Depression (40-50%)<sup>1</sup>
- Anxiety (20-50%)<sup>2</sup>
- Cognitive impairment (20-80%)<sup>3</sup>

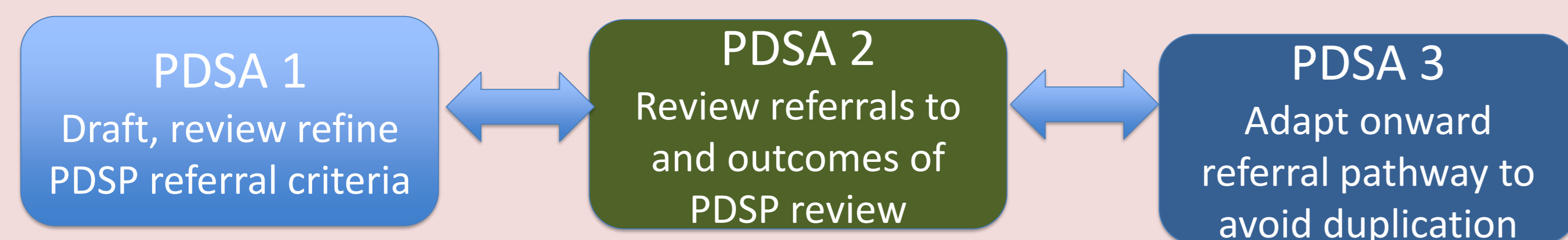
Psychiatric symptoms have a significant impact on patients' quality of life (QoL), are often complex and require the expertise of psychiatry and psychology to adequately diagnose, treat and monitor MDTs care models for PD that include mental health experts exist, but there is limited evidence as to their impact in terms of quality of life or health economics.

## Aims

1. Improve the assessment and treatment pathway for our patients with Parkinson's Disease and psychiatric symptoms
2. Evaluate the impact of integrating a Parkinson's Disease Specialist Psychiatrist (PDSP) into the MDT

## Methods

We integrated one session per week of input from a PDSP specialist into our existing Parkinson's MDT service via series of Plan Do Study Act (PDSA) cycles:



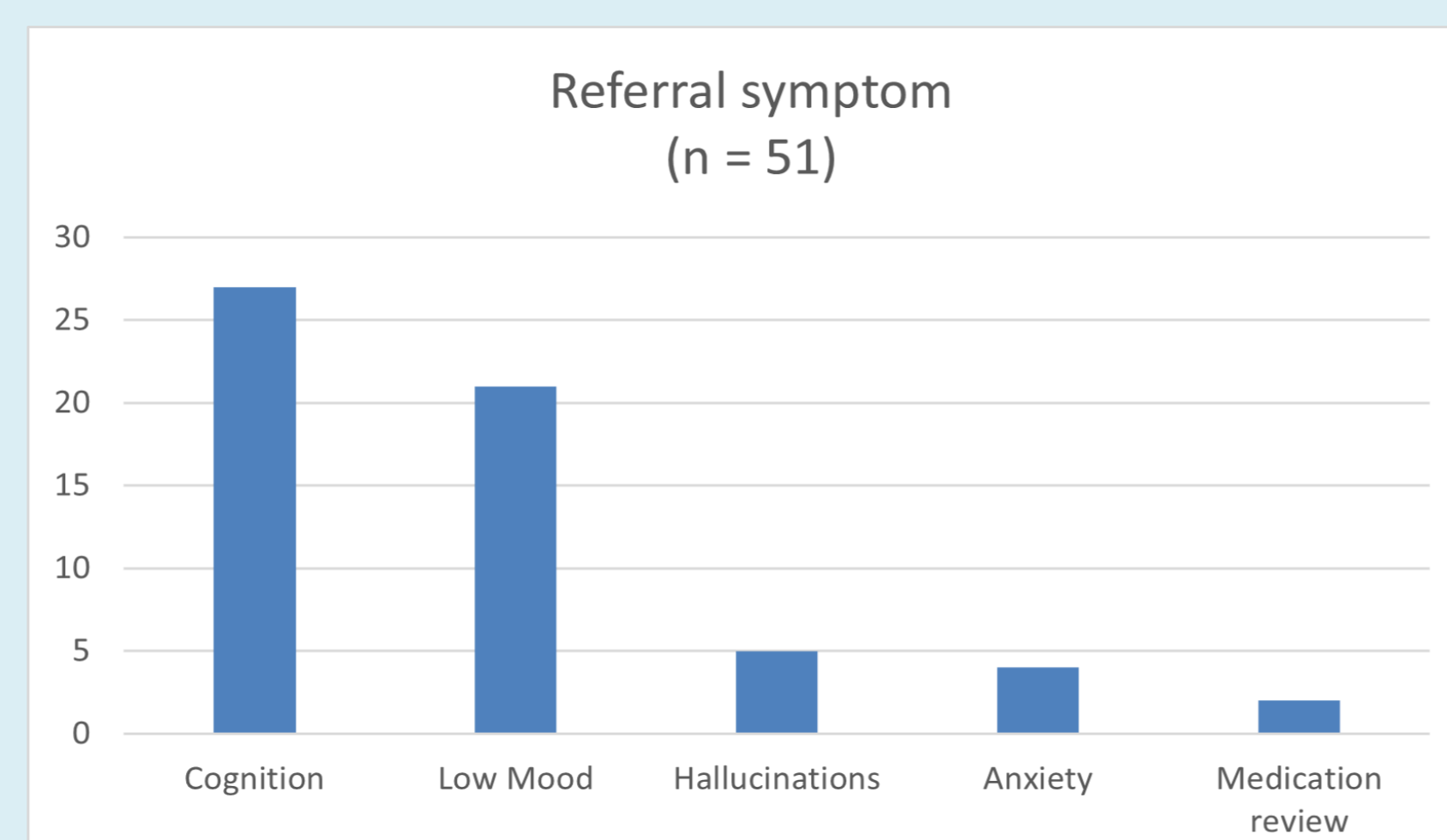
Using electronic clinical records we collected data from a cohort of PD patients seen by our PDSP over 6 months to map:

- Symptoms
- Time to review, diagnosis and treatment
- Follow-up and onward referral

## Results 1: Symptoms

51 patients with PD were referred to our PDSP with the following symptom(s)

- cognitive impairment (53%)
- low mood (42%)
- hallucinations (10%)
- anxiety (8%)



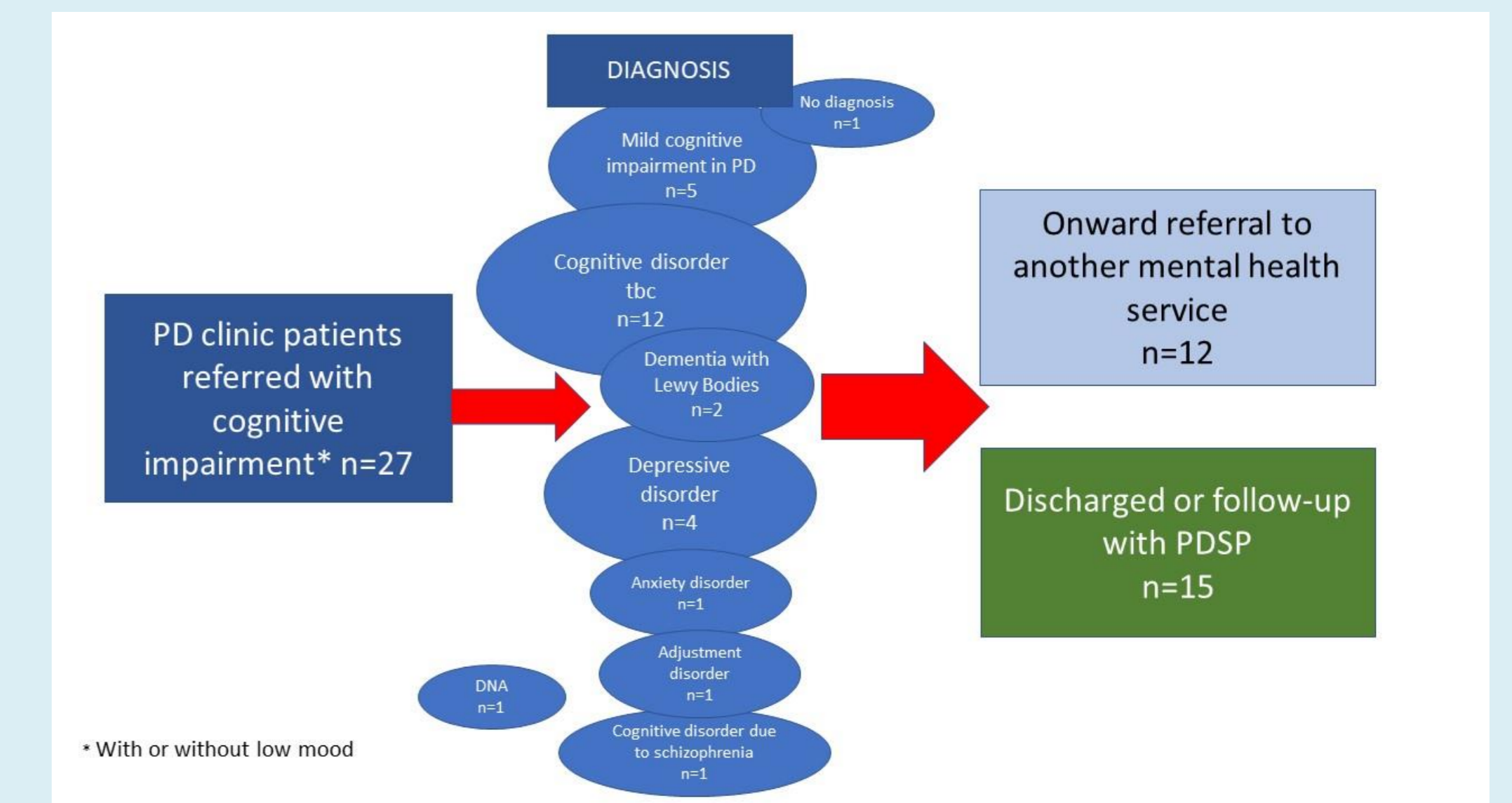
All patients were seen within eight weeks.

## Results 2: Cognitive impairment

Of the 27 patients referred with cognitive impairment, review by our PDSP meant that 15 did not need onward referral to a separate mental health service

Diagnoses included:

- Mild cognitive impairment
- Lewy body disease
- Anxiety disorder
- Depressive disorder



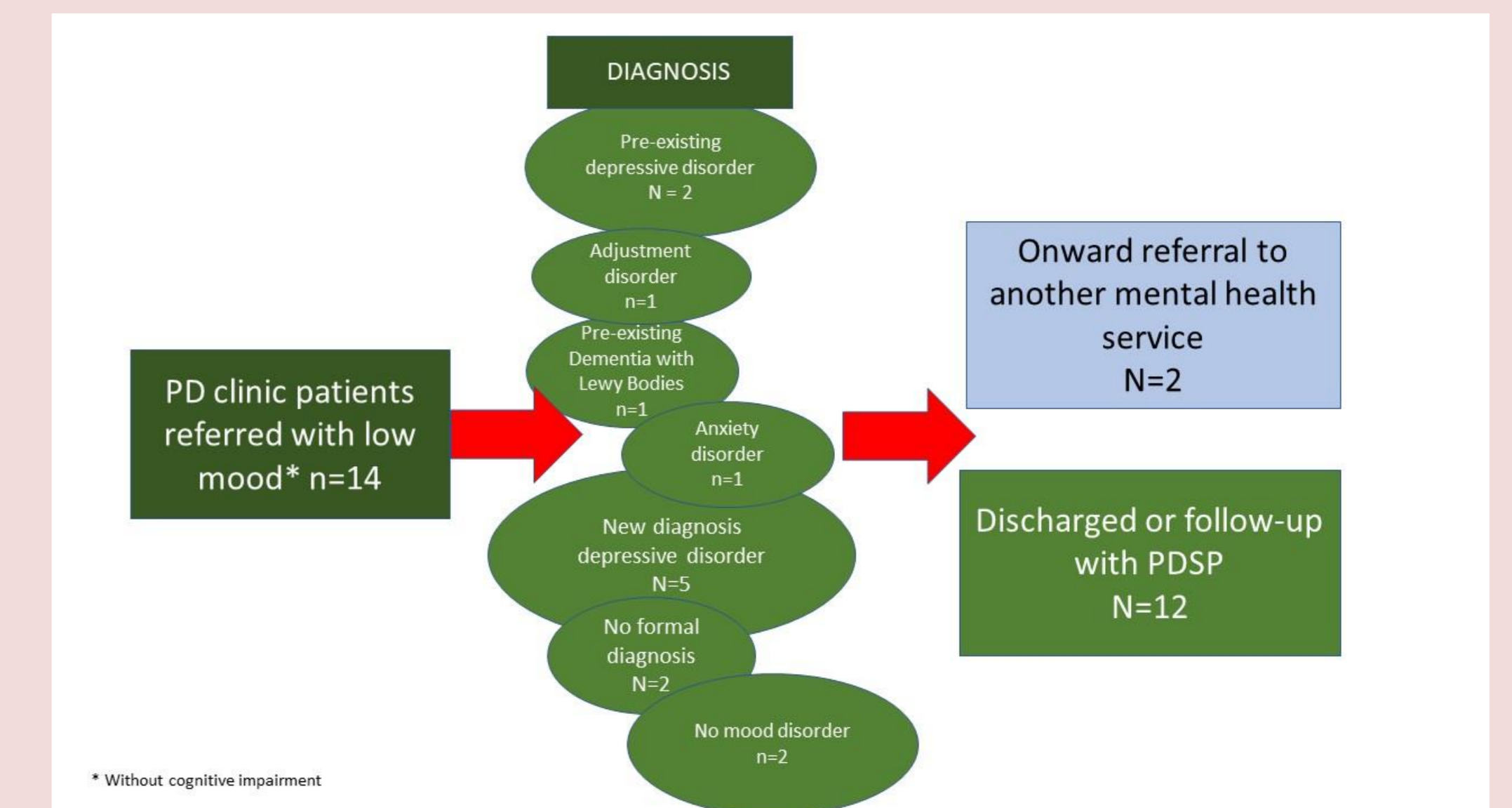
## Results 3: Low mood

Of 14 patients with low mood (without memory impairment), review by our PDSP meant that 12 did not need onward referral.

Outcomes included

- Diagnosis of new depressive disorder
- Review of existing depressive disorder
- No formal diagnosis

The 2 patients referred on were judged to need support from a Community Psychiatric Nurse



## Conclusions

- Prior to integration of a PDSP, PD patients with mental health symptoms needed to be referred to another service, often with a long wait
- Over a period of 6 months, assessment by a PDSP prevented 27 onward referrals to another service
- It is likely that integration of a PDSP into the MDT reduces costs and time to assessment and treatment for patients with PD and mental health symptoms

## Next steps

Pre-post quality improvement analysis of impact of integration of PDSP into PD MDT in relation to:

- Time to assessment, diagnosis and treatment
- Cost reductions

## References:

1. Reijnders JS, Eht U, Weber WE, et al (2008). A systematic review of prevalence studies of depression in Parkinson's disease. *Mov Disord*.23:183-189.
2. Pontone et al (2011) Anxiety and self-perceived health status in Parkinson's disease. *Parkinsonism Relat Disord* 17(4):249-54
3. Watson and Leverenz (2010). Profile of cognitive impairment in Parkinson's Disease. *Brain Pathol*.20(3): 640-5