

Specialist multidisciplinary rehabilitation for people with Parkinson's in the community: a RCT

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on behalf of the SPIRiT Trial Project Team



Specialist Parkinson's Integrated
Rehabilitation Team Trial

GPDRG



Overview

- Background
- Aims and hypotheses
- Methods
- Questions

Background: Parkinson's

- Chronic, progressive neurological condition
- Affects 100-180 people per 100,000 (6-11 people per 6000) of the UK general population
- Annual incidence of 4-20 per 100,000
- Rising prevalence with age
- Higher prevalence and incidence in males
- Total annual cost £449M-£3.3B (depending on cost model and prevalence rate)

(NICE 2006; Findley 2007)

Background: Policies

- **NSF Long Term Conditions** (DH 2005)
 - ✓ personalised care planning, rehabilitation, carer support
- **Our health, our care, our say** (DH 2006)
 - ✓ integrated health and social care, provision of services closer to patients' homes
- **NICE guidelines for management of Parkinson's** (NICE 2006)
 - ✓ regular patient review, comprehensive care plans, central role for specialist nurses, access to PT/OT/SLT

Background: Previous study

- Single-blind, cross-over RCT
- Day hospital setting
- 6 weeks MDT vs. usual care
- $n=137$ PwP ($n=68$ carers)
- ✓ PwP: improvement in mobility, gait, speech, depression, health-related QOL at 6 weeks
- ✓ Carers: less depression, greater health-related QOL at 6 weeks
- ❖ Benefits dissipated 4 months post-intervention
- ❖ Costly (facility overhead, hospital transport)

(Trend *et al.* 2002; Wade *et al.* 2003; Gage *et al.* 2006)

Background: SPIRiTT

- Would domiciliary-based MDT rehabilitation be more cost-effective than in a day hospital setting?
- How can immediate treatment benefits be maintained in the longer term?
 - ✓ Use of care assistants
 - NHS Workforce Strategy
Greater use of non-registered staff with training
 - Parkinson's Care Assistant Training Study

SPIRiT: Aims and Hypotheses

- Evaluate acceptability, clinical and cost effectiveness of alternative models of specialist rehabilitation for PwP in the community

- ❖ MDT rehabilitation service

- ❖ MDT rehabilitation service + Parkinson's care assistant support

- A package of domiciliary MDT specialist rehabilitation will benefit:

- ✓ PwP (mobility, independence, wellbeing, health-related QOL)

- ✓ Live-in carers (reduced strain, health-related QOL)

- ✓ Society (reduced use of health and social care services)

- Addition of Parkinson's care assistant support will help maintain treatment benefits

SPIRiT: Hypotheses

- Inform future service development
 - Improve quality of care and outcomes for PwP and live-in carers
- Intervention will be acceptable to major stakeholders
(barriers and facilitators to implementation will be identified)

Methods (1)

•Design

- ❖ Pragmatic, single-blind, 3-parallel arm, repeated measures RCT

•Setting and location

- ❖ Community-based, Surrey

•Sample

- ❖ 270 PwP and 213 live-in carers (power=80%, size=5%, 2-tailed test)

•Inclusion criteria

- ❖ Clinical diagnosis of Parkinson's
- ❖ Resides in community in own living area
- ❖ Has some limitation on at least one outcome measure
- ❖ Capacity to provide written informed consent

• Exclusion criteria

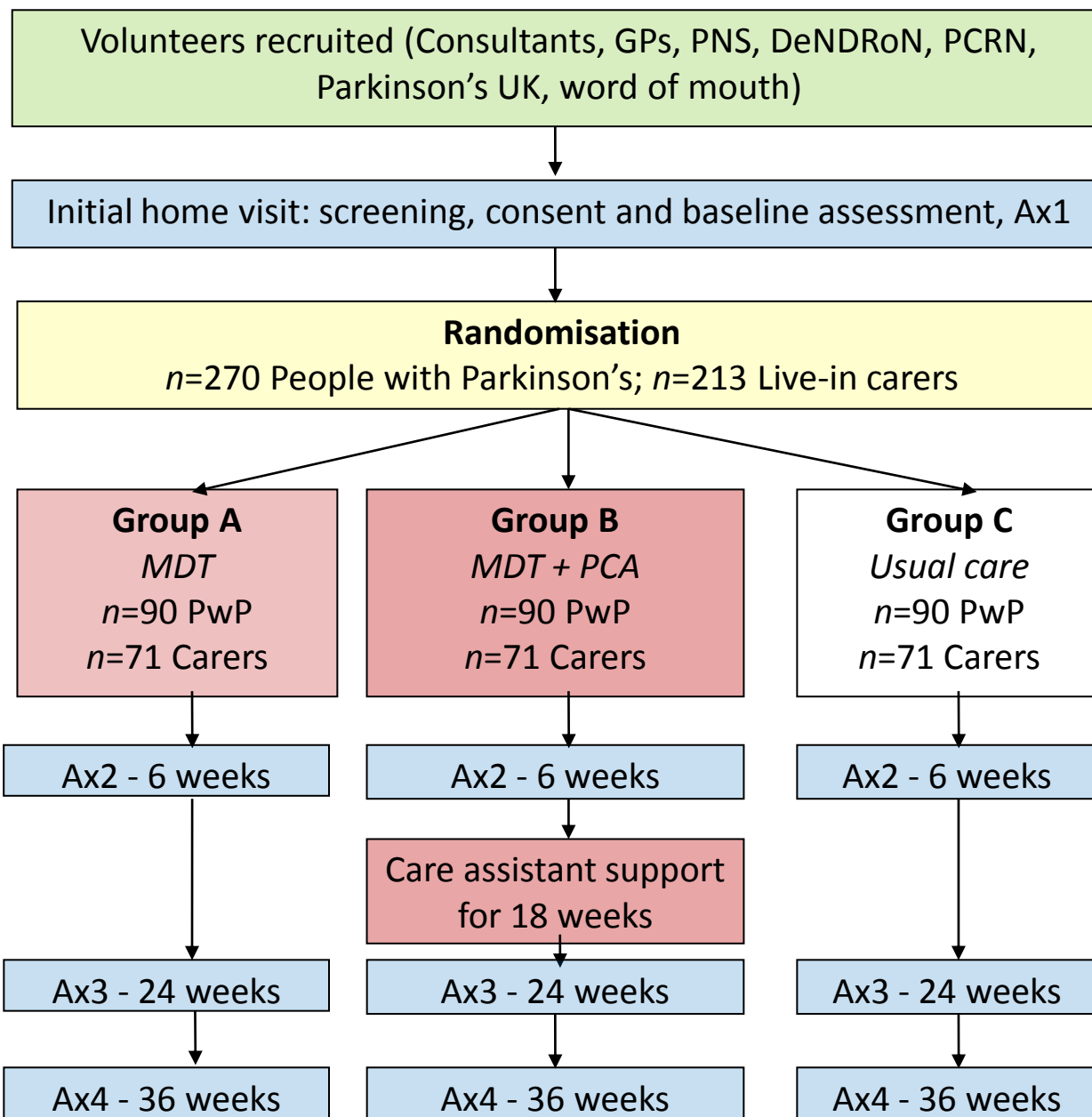
- ❖ Current or in the past 6 months, MDT rehabilitation programme
- ❖ Current or in the past 6 months, involved in rehabilitation-based research for Parkinson's

• Randomisation

- ❖ Block randomisation, stratified for PwP with/without live-in carers
- ❖ Centrally coordinated by independent investigator

• Interventions

- ❖ Group A: MDT input over 6 weeks
- ❖ Group B: MDT input over 6 weeks + 18 weeks of Parkinson's care assistant support
- ❖ Group C: usual care (control)



Multidisciplinary team

2 Parkinson's nurse
specialists (3.5 days)

2 Neurophysiotherapists
(2 days)

1 Occupational therapist
(1 day)

2 Speech and language
therapists (1.5 days)

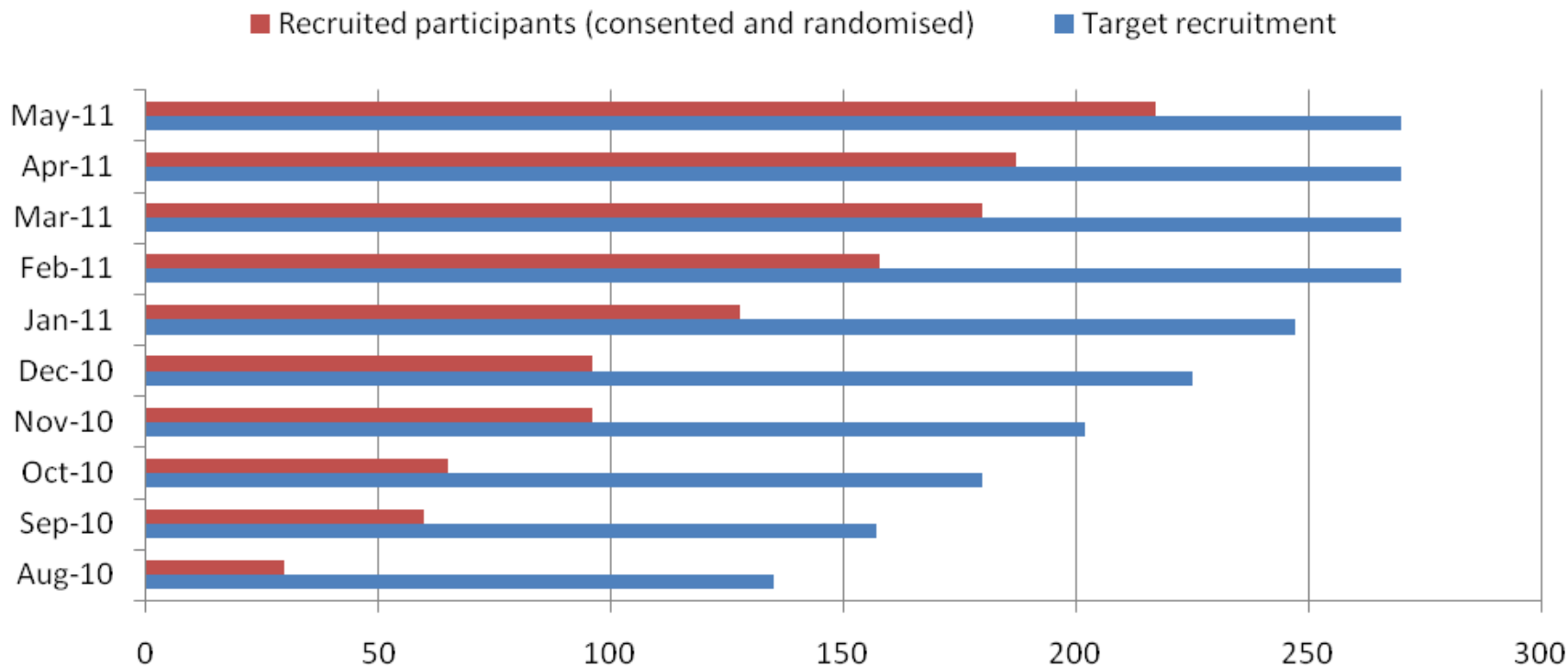
2 Care assistants (4 days)



Methods (3): Outcome assessment

- Range of validated instruments including Self assessment Parkinson's Disease Disability Scale (Brown activities score) Barthel ADL Index, EQ5D, SF-36, Modified Carer Strain Index
 - ❖ Assessments conducted by independent assessor at:
 - Baseline (prior to randomisation)
 - Post-treatment (week 6)
 - Short term follow up (week 24)
 - Long term follow up (week 36)
- Acceptability of interventions
 - ❖ semi-structured interviews of participants, MDT, service providers and commissioners by independent investigator at end of study

Recruitment



Participants demographics (n=158)

Mean age: 72.5 years (SD 8.2; 49-91)

% Male: 62.7 (n=99)

% with recruited live-in carer: 62.7 (n=99)

PwP withdrawn: 11 [A=2; B=3; C=6]

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