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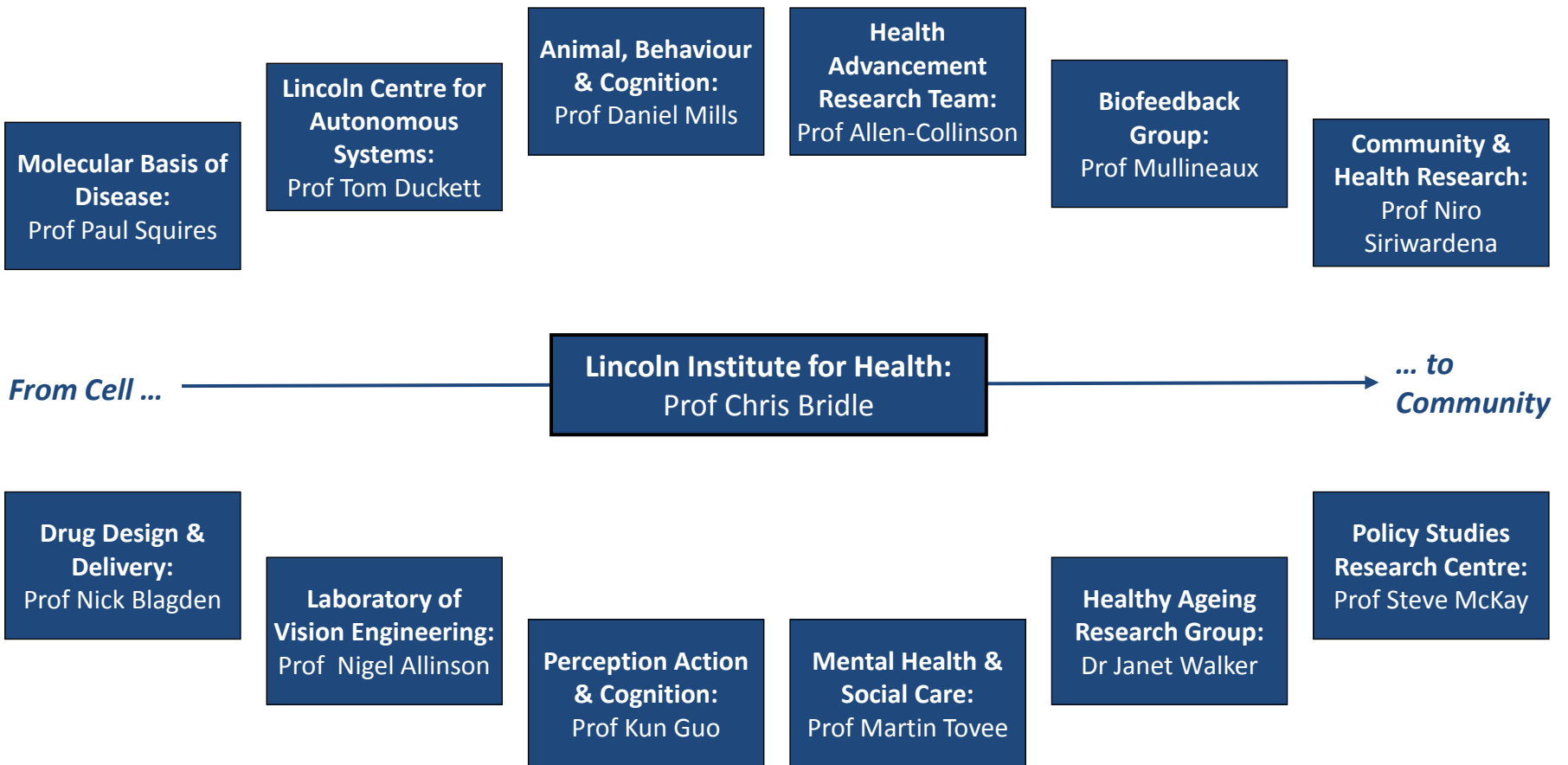
# Physical activity interventions for older people

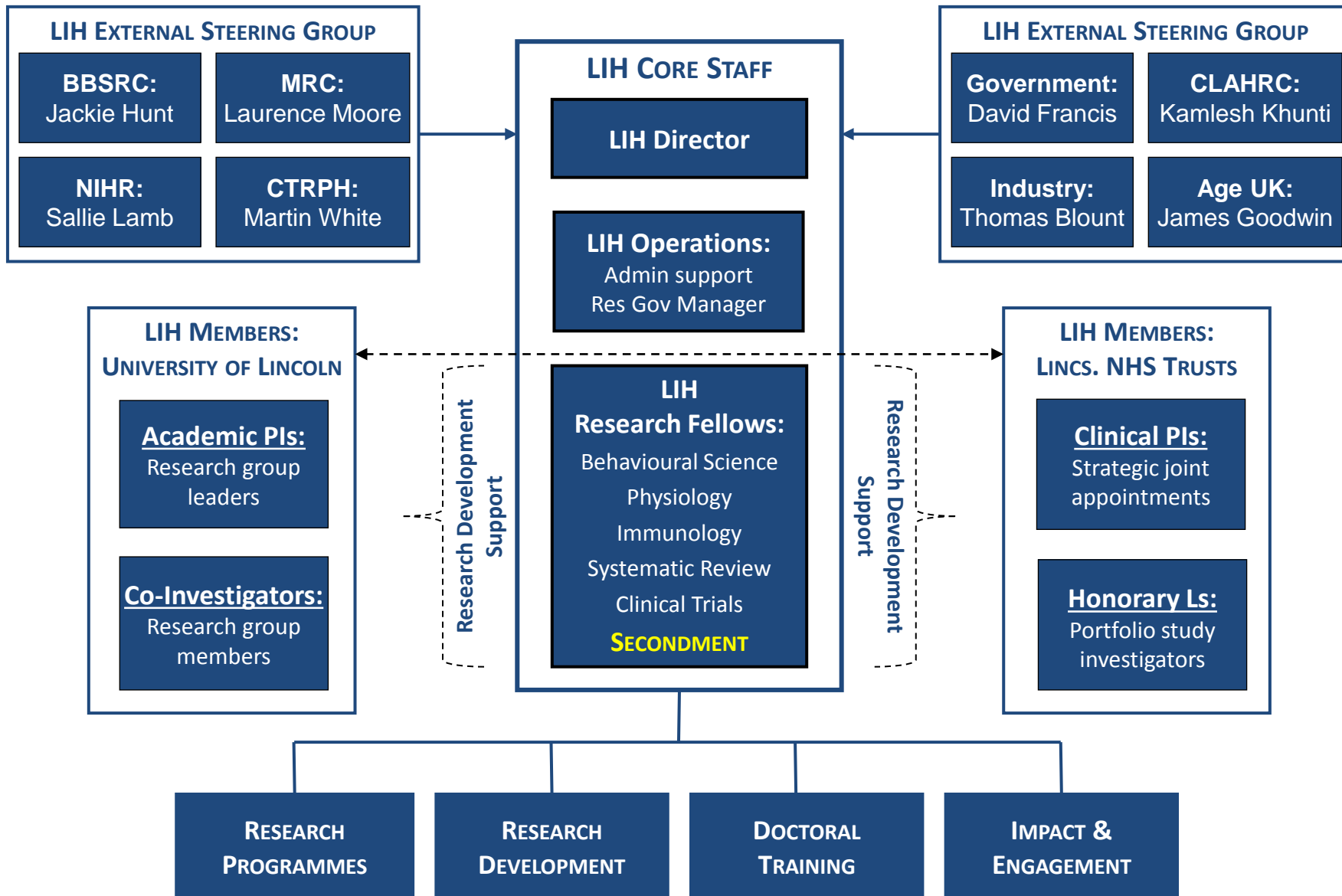
**Professor Christopher Bridle**  
Director, Lincoln Institute for Health

This seminar forms a part of the workshop to establish a research development group in the area of Healthy Ageing in Older Adults, with a particular focus of physical activity. The seminar will begin with a brief overview of the Lincoln Institute for Health, illustrating the LIH capacity for cell to community translational research, before focussing on specific examples of our research in physical activity interventions with older people. These examples will include large, multi-centre clinical trials in the areas of falls prevention, rheumatoid arthritis and dementia. The seminar will introduce some of the behaviour change approaches we have developed, applied and tested, as well as highlight key lessons learned.

# Outline

- Lincoln Institute for Health
- Behaviour change intervention approaches
- Exercise interventions with older people
- Summary of top tips, key issues, lessons learned, etc.

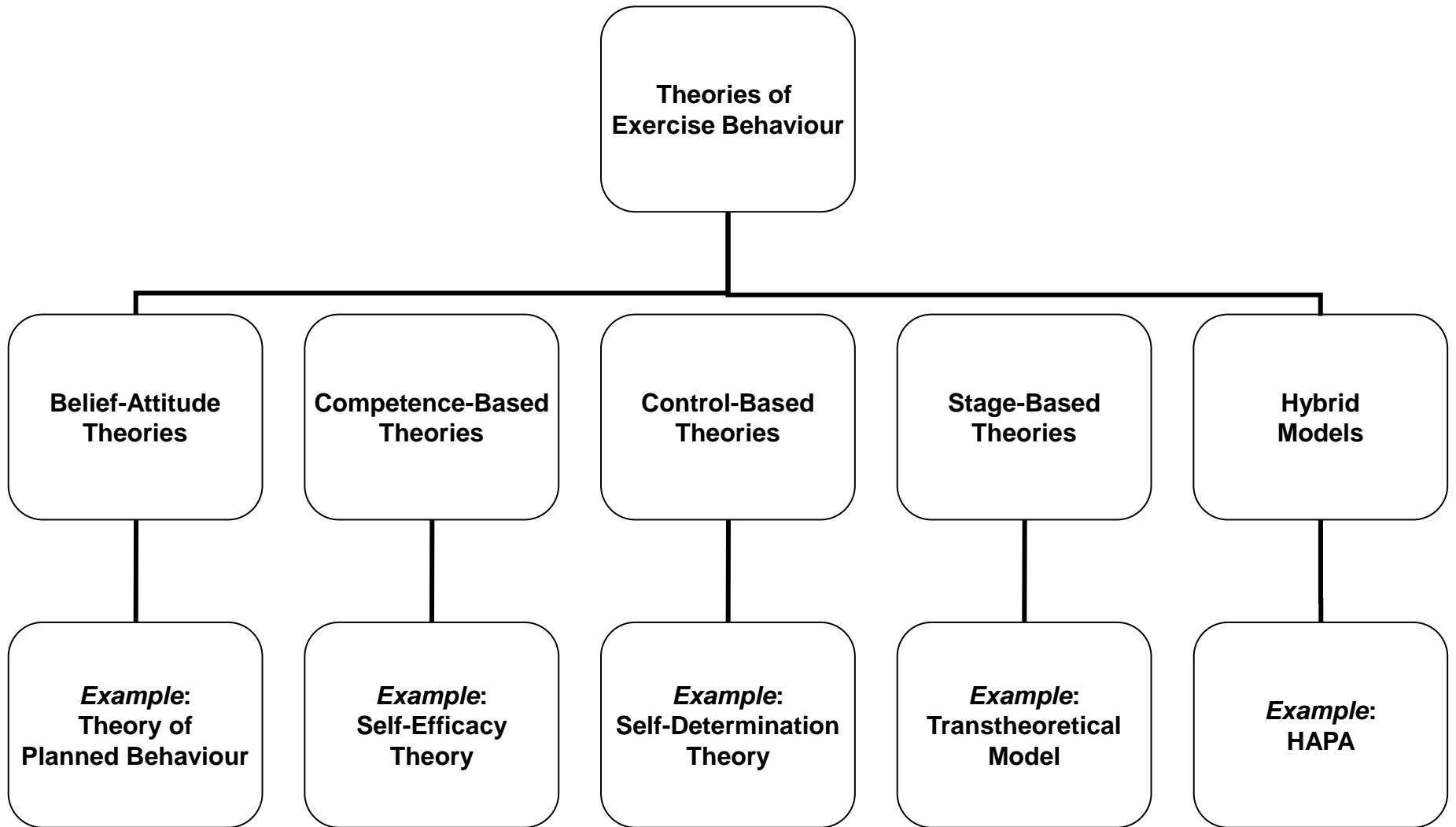


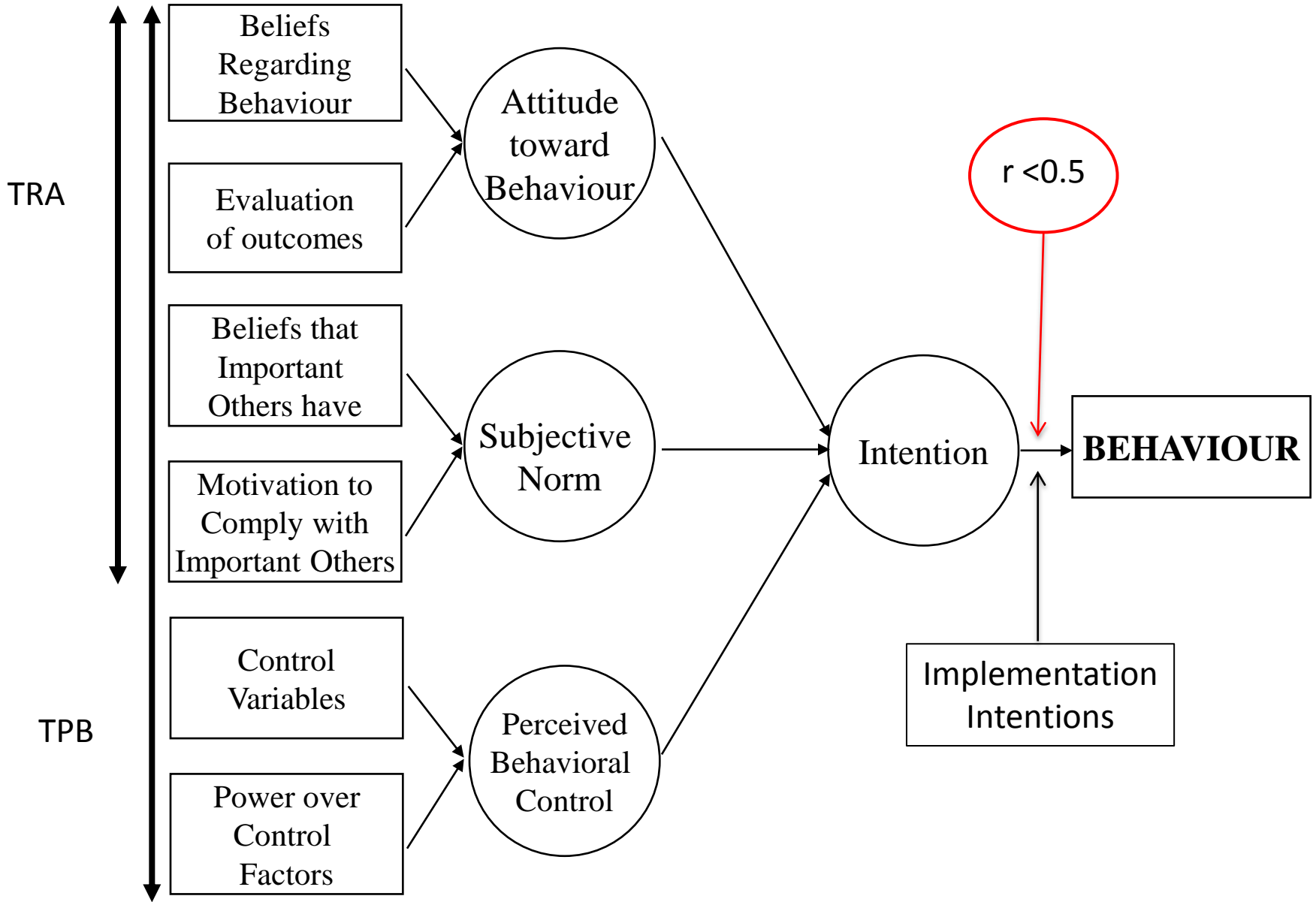


# Theoretical Approach

***'nothing is so practical as a good theory'***

Kurt Lewin (1951)







# Implementation Intention

## Exercising as part of your daily routine

It is a good idea to make exercising a part of your routine. You can do this by making a plan to exercise at the same time as you do something else that you do every day, e.g. after you brush your teeth in the morning, or before you have you tea. In the example below, someone decided to exerciser at 8am, in the kitchen when they have finished their breakfast. We want you to make your own plan using the Example Plan as a guide. **Write in** the time, place and what you will be doing at the time you will exercise in the spaces provided in My Plan below.

### Example Plan

**If** it is            *8:00am*  
and I am            *in the kitchen*  
and I                *have finished my breakfast*  
**Then** I will complete my exercise for the day

### My Plan

**If** it is            \_\_\_\_\_  
and I am            \_\_\_\_\_  
and I                \_\_\_\_\_  
**Then** I will complete my exercise for the day

Now please read your entire plan (from the first word [If] to the last word [day]) back to yourself quietly at least three times. It is very important that you concentrate when you do this.

When you can repeat the entire plan to yourself correctly without reading it, tick this box

# Research Examples



### Key publications:

Protocol: *BMC Musculoskeletal Disorders* (2012)  
Intervention: *Physiotherapy* (2012)  
Completed trial: *Lancet* (2015)

### Funding & Partners:

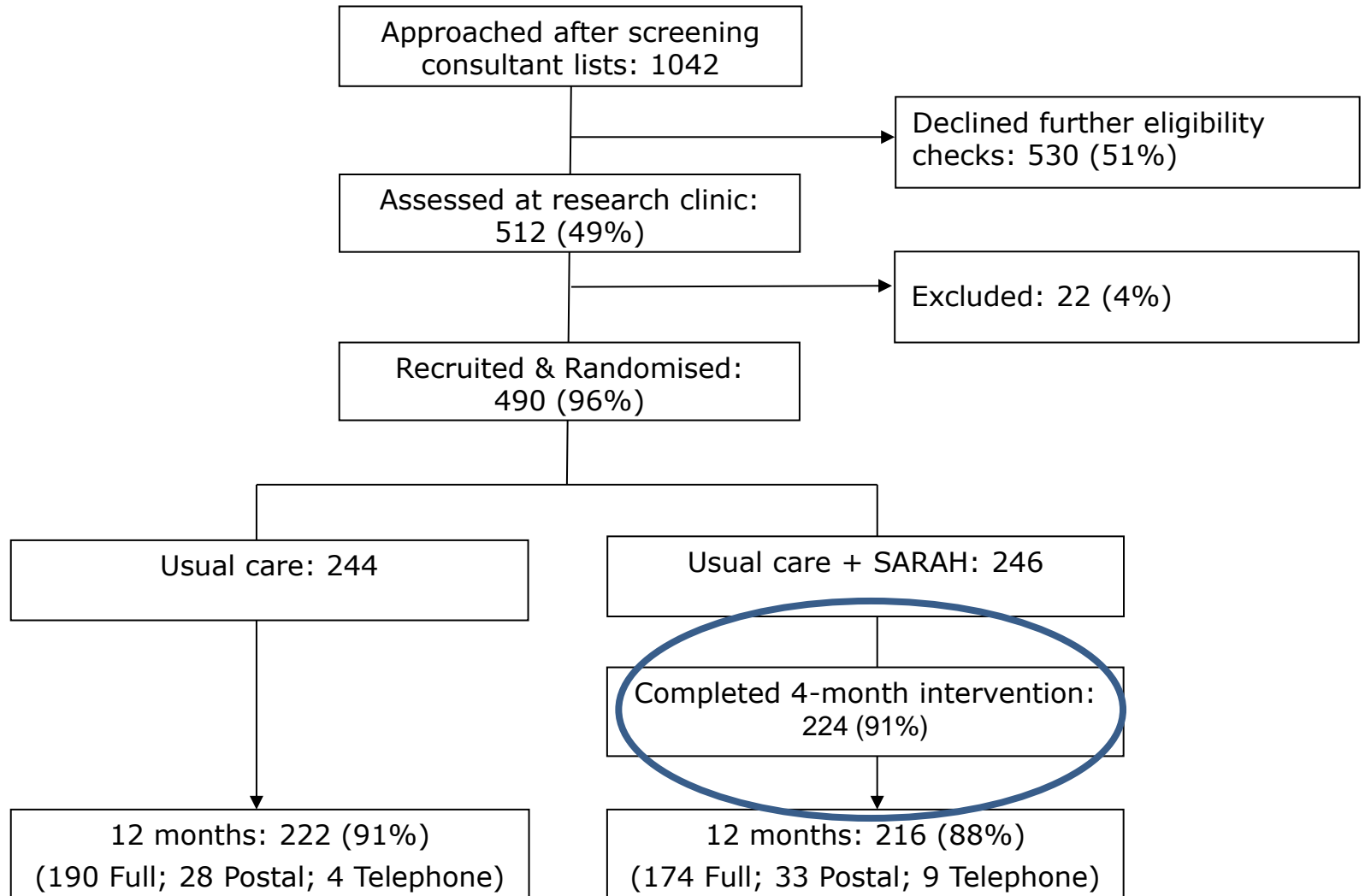
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**HERG**  
Health Economics Research Group



# SARAH Intervention

- Progressive stretching and strengthening exercises for the hand using theraband
- Take-home pack for exercising between appointments (3-4 weeks)
- Goal-setting
  - supported and translation to independent action
  - barriers and facilitators
- Implementation intentions – action planning
- Diary-based performance feedback



### Key publications:

Protocol: *Trials* (2016)  
Intervention: *Physiotherapy* (2015)  
Completed trial: *TBC* (c2018)

### Funding & Partners:

Funder: NIHR HTA (09/80/04)

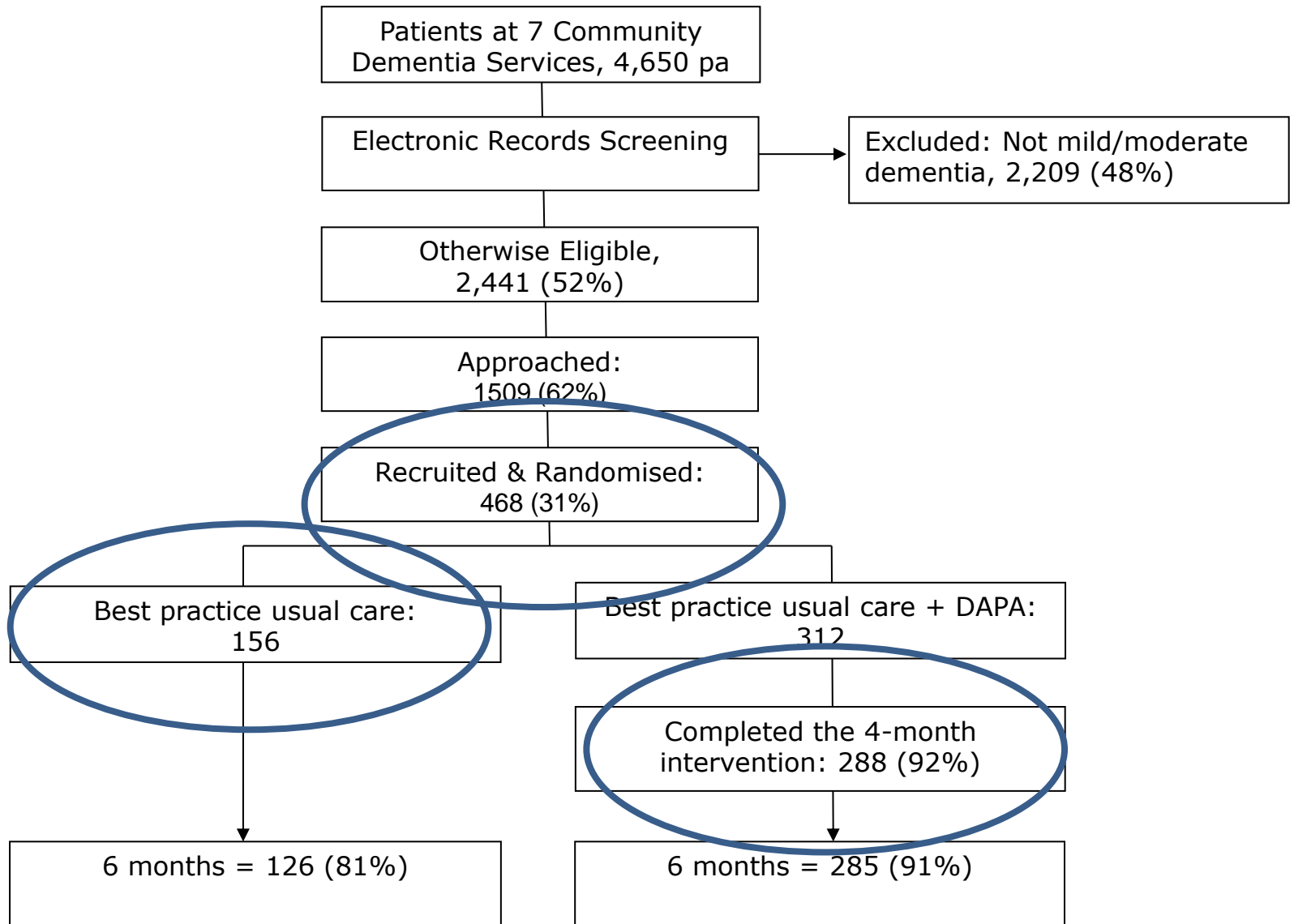
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**OxDARE**  
Oxford Dementia and  
Ageing Research



# DAPA Intervention

- Progressive aerobic (static bikes) and resistance (weights) exercise
  - Aerobic: 5 mins low intensity (RPE=2), 20 mins moderate intensity (RPE=4), ? 5 mins high intensity (RPE = 6)
  - Resistance: max weight lifted 10 times with good form
- Group-based, 2, 1-hour sessions pw for 4 months
  - carers encouraged to attend
- Encouraged to begin independent exercise from 2 months
  - Implementation intentions and information
- Post-supervised exercise (4-12 months)
  - 3 telephone, 1 face-to-face with physiotherapist





### Key publications:

Protocol: *BMJ Open* (2016)  
Intervention: *TBC* (c2017)  
Completed trial: *TBC* (c2019)

### Funding & Partners:

Funder: NIHR HTA (08/14/41)

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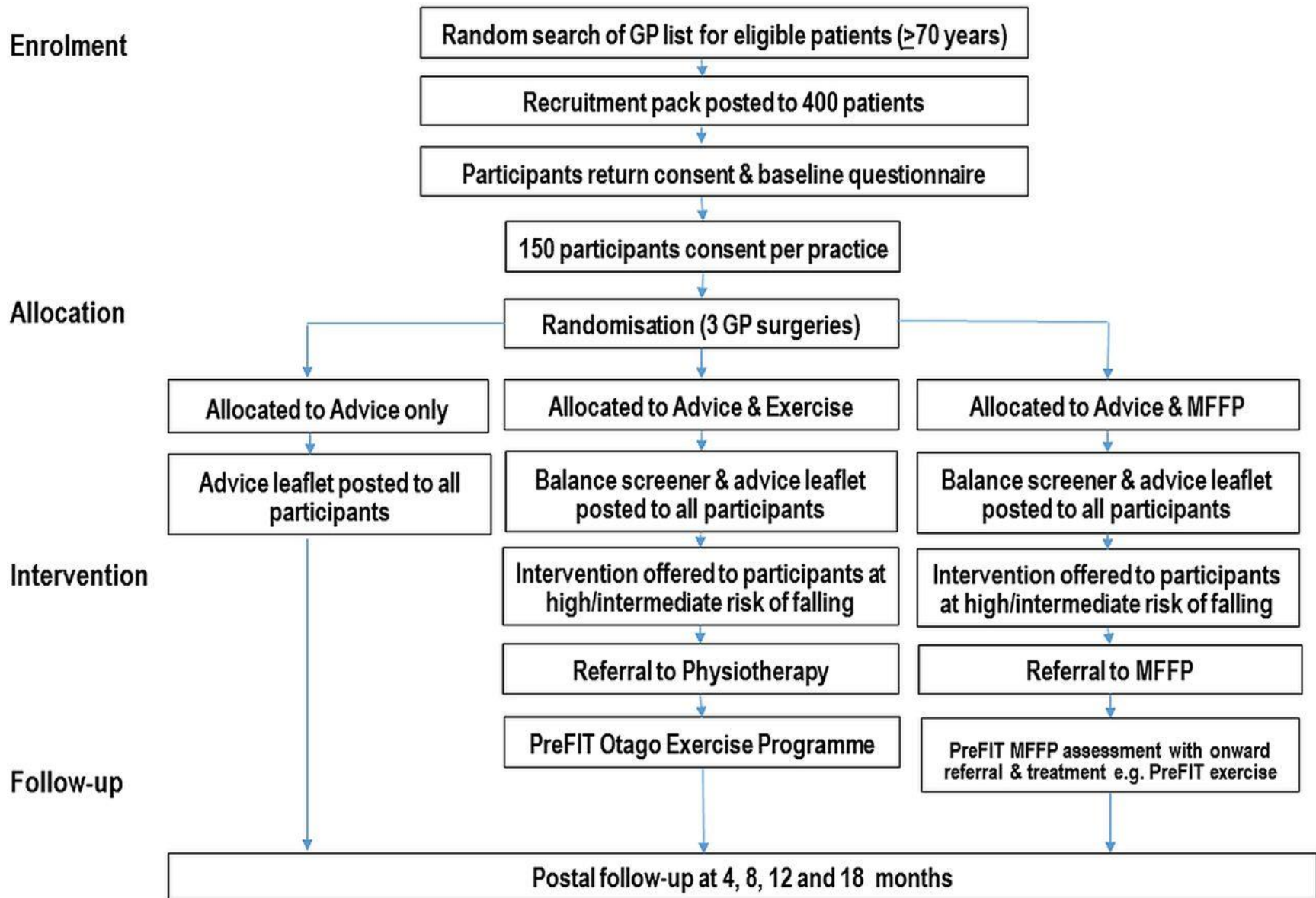


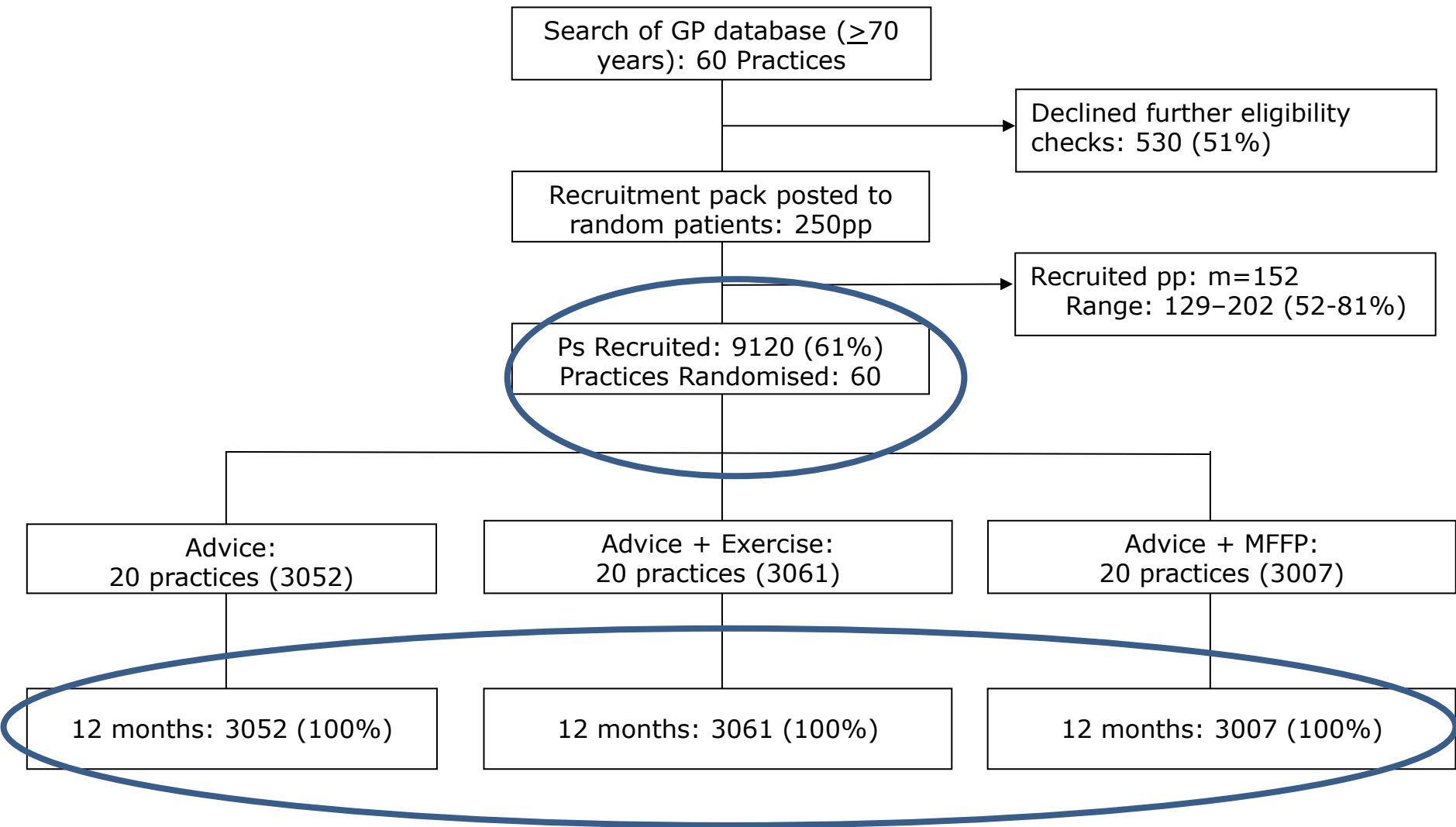
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**NHS**

**National Institute for  
Health Research**

Clinical Research Network  
Primary care





# PreFIT Intervention (Exercise)

- Based on the Otago Exercise Programme
- Individually prescribed and progressive
- Targets lower limb strength, balance retraining and walking
- Delivered in groups and alone at home
- 1 supervised session pw + 2-3 at home for 12 weeks
- Post intervention face-to-face contact with telephone support

What can we conclude?

# Key Points (1)

- Wide range of beneficial effects of exercise make it an obvious intervention
  - Prevention & treatment, physical & mental health, QoL & independent living
- Exercise interventions with older people are feasible
  - supported by psychological theory
  - high levels of uptake, adherence and completion
- Older people contribute significantly to research process
  - meaningful PPI engagement from outset

# Key Points (2)

- Successful bids underpinned by
  - real-world need – patient / NHS driven
  - evidence synthesis – demonstrable uncertainty
  - multidisciplinary teams – delivery is crucial
  - best practice usual care – optimising the comparison
  - translation to continued independent exercise

Thanks for listening.  
Any questions, ... now or later?

Professor Chris Bridle  
Director, Lincoln Institute for Health  
University of Lincoln  
T: (01522) 886004  
E: [cbridle@lincoln.ac.uk](mailto:cbridle@lincoln.ac.uk)