# Research for Patient Benefit Programme



## School for Primary Care Research Masterclass



Dr Nick Sillett, Senior Research Manager

### **Outline**

### The RfPB programme

- Scope
- Funding limits
- Opportunities for early career researchers
- Future initiatives and opportunities in the programme



## RfPB Programme: Overview

- Response mode funding programme
- Grants may be:
  - Costed up to £500,000
  - Feasibility applications costed up to £300k
  - More upstream studies costed up to £200k
- Three funding competitions per year (~130 apps/round)
- 8 Regional Advisory Committees
- ~1400 awards made to date totalling nearly £313m
- Success rate of ~22%
- Projects need to have a clear trajectory to patient benefit

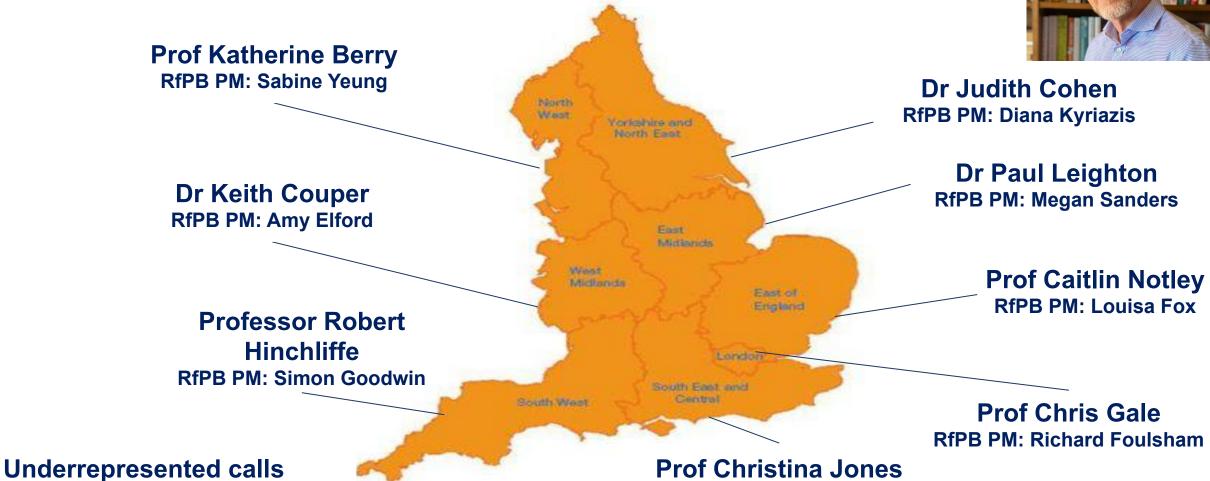




#### **RfPB Committee chairs**

**Programme Director: Professor Kevin Munro** 





RfPB PM: Jack Finn



RfPB PM: Zuzanna Tajchman

## RfPB Scope

#### RfPB will fund:

- → Studies which evaluate the provision and use of NHS services
- → Evaluations of the effectiveness and cost effectiveness of interventions
- → Formal evaluations of innovations and developments
- → Feasibility studies and research requiring follow on awards from other funders
- Development and refinement of new interventions, scales or outcome measures
- → Needs assessments, evidence synthesis, systematic reviews, methods development, and exploratory studies

#### RfPB will not fund:

- Laboratory-based research or basic science research
- Infrastructure, such as setting up or maintaining research units
- Applications which are solely service developments, unless they have wider generalisability
- Applications which are only audits or surveys (can be part of an integrated research study)
- Applications which are primarily concerned with setting priorities for future directions of research



## RfPB funding limits guidance

The funding for individual projects is up to £500,000 for up to 36 months.

Our tiered funding strategy aims to balance the likelihood of a proposal achieving patient benefit against its cost.

Tier 1	£500,000	Proposals with a clear and close trajectory to patient benefit (e.g. randomised controlled trials, diagnostic accuracy studies)
Tier 2	£300,000	Feasibility and preparatory studies
Tier 3	£200,000	Higher risk, more exploratory proposals which have a longer trajectory to patient benefit



## RfPB funding limits

Examples of type of research which would fall into Tier 3:

- Observational studies using clinical databases, e.g. to provide estimates of an effect size useful in the design of a clinical trial
- Developing and refining interventions
- Developing new scales or outcome measures
- **Exploratory studies**, *e.g.* using qualitative methods to provide insights into an intractable problem
- Secondary data analyses (including developing predictive models and needs assessments)
- Additional follow up of patients in a completed clinical trial
- Systematic reviews where the number of relevant studies is likely to be limited



### **New Investigators**

- New, relatively inexperienced investigators (could be highly experienced clinicians) are encouraged to apply to RfPB
- Within NIHR, RfPB offers best opportunity for early career researchers to act as lead applicant
- Team of investigators are assessed as a whole
- About 50% of funded applications are led by an early career researcher (i.e. someone who
  has not yet been the Principal Investigator for a substantial award (£100,000+))

#### **Joint Lead applicants**

- Early career researchers leading applications to RfPB are encouraged to apply as Lead
   Applicant, with a more senior colleague fulfilling the role of mentor and Joint Lead Applicant
- Provide clear justification for how the Joint Lead Applicant will provide mentorship and guidance for the early career researcher



## Under-represented disciplines and specialisms

RfPB is running a series of highlight notices targeting underrepresented disciplines and specialisms, including:

- Nurses and midwives (99 applications, 16 applications funded)
- Methodologists (119 applications, 25 applications funded)
- Allied Health Professionals (101 applications, 58 invited to stage 2)
- Other registered health professionals (call launched in November 2024).

The main aim is to support underrepresented disciplines and specialisms to lead research awards and strengthen research careers.

Each highlight notice/call has slightly different eligibility criteria, with nurses and midwives who are early career researchers being invited to apply.



### Future plans and initiatives for RfPB

#### **Regional priorities**

 Recently rolled out regional highlight notices inviting applications that address regional needs and priorities.

#### PPI

 Expectation that PPI activities are reported on in peer reviewed publications alongside scientific findings.

#### Research inclusion

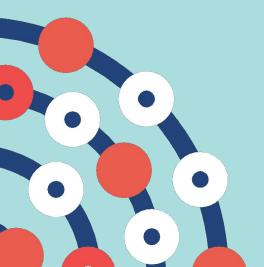
 Increasing research inclusion in applications and improving the assessment of EDI (Equality, Diversity and Inclusivity).







## Impact case studies



## PARTNER2: preventing sexual transmission of HIV in gay couples

## PB-PG-1013-32069 Observational study to evaluate effectiveness of antiretroviral therapy to prevent HIV transmission - Professor Alison Rodger - Royal Free London - £341,265

#### **Problem**

- 3,000 new HIV infections per year in men who have sex with men amount to £1 billion in future NHS costs
- Lack of evidence on the effect of antiretroviral therapy (ART) on risk of HIV transmission in men who have sex
  with men
- Several studies showed that in heterosexual couples, the risk of HIV transmission was dramatically reduced if the HIV positive partner was on ART

#### Study

 Observational multicentre study: 75 sites across 14 European countries – 972 couples were monitored for 2 years, reporting risk transmission behaviour every 6 months and providing blood samples from HIV negative partner every 6-12 months

#### **Impact**

- Results published in The Lancet in 2019
- Endorsed by over 1,000 HIV organisations in over 100 countries
- Evidence from the study underpin the World Health Organisation and UNAIDS guidelines
- Reducing HIV transmission leads to improved public health and reduces NHS care costs



## Defining obesity cut-off in minority ethnic groups

PB-PG-1217-20038 Defining obesity cut-off points for the risk of type 2 diabetes, cardiovascular disease and cancer among minority ethnic groups: a prospective cohort study using national linked electronic health records - Dr Rishi Caleyachetty - NHS Coventry and Warwickshire CCG - £123,128

#### **Problem**

- WHO and NICE recommend a specific BMI cut-off to trigger preventative action to reduce the risk of obesity-related conditions such as type 2 diabetes and cardiovascular disease. The BMI cut-off of 30 was developed from observational studies in Europe and the USA of exclusively White populations.
- Subsequent evidence indicated that adults from other ethnic groups developed type 2 diabetes at lower BMIs and WHO
  recommended lowering the BMI cut-off to 27.5 for Chinese and South Asian populations based on sparse evidence base that might
  be inappropriate for some minority groups.

#### Study

- This was the first study to define BMI cut-offs for obesity based on the risk of developing type 2 diabetes in minority ethnic adults
- Electronic health records from 1.47 million adults across primary care were linked to secondary care records to identify ethnicity-specific obesity BMI cut-off points for the risk of type 2 diabetes

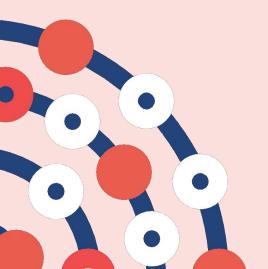
#### **Impact**

- The first study to show that interventions should be triggered at a lower (and different) BMI for Arab populations and Black and south Asian ethnic subgroups
- Results published in Lancet Diabetes and Endocrinology
- The finding is expected to be reflected in the NICE guideline 'Obesity: identification, assessment and management guidance' when it is updated





## **Application Process and Timeline**



## **Application Process**

#### **Stage 1 process (formative assessment):**

- Applicant completes main sections of Standard application form for Committee to triage applications and offer advice/support to all applicants.
- Committee considerations:
  - Relevance & importance to patients and NHS
  - Research plan
  - Clear and timely trajectory to benefit
  - Team
  - PPI (now and future plans)
  - EDI (hearing the hidden voice)
  - If feasibility: stop/go criteria, efficacy and future plans
  - Value for money and is cost commensurate with risk?
  - What can be improved (and can this be achieved within 6 weeks)?



## **Application Process**

#### **Stage 2 process (summative assessment):**

- Applicant is invited to revise Stage 1 application in light of committee's comments
- Complete other sections (finance)
- 6 weeks to complete
- Stage 2 application sent for external review (not if under £300K)
- Assessed by committee



#### **Committee Assessment Criteria**

#### Significance and potential benefit to the NHS and its patients

- What is the trajectory to patient/carer/service user benefit?
- What is the likelihood this will lead to patient/carer/service user benefit?
- What is the likely scale of impact

#### Quality of the research proposed

- Is this an important research question?
- Is the proposed methodology robust, and based on sound scientific rationale?
- Will the proposed methodology answer the research question?
- Is there evidence of attention to issues of equality, diversity and inclusion?
- Has the research involved service users at relevant stages of the project? (PPI)

#### Value for money

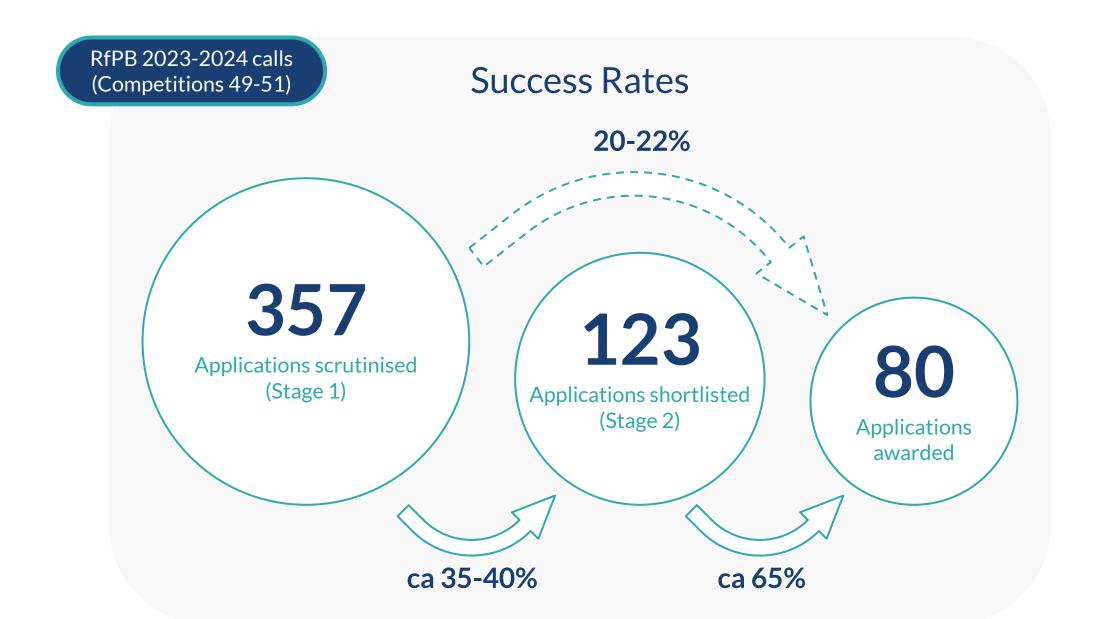
- Given the likelihood of achieving patient benefit, is this proposal costed in the right tier?
- Given the likely scale of impact, does it provide value for money?



## 6 point scoring scale

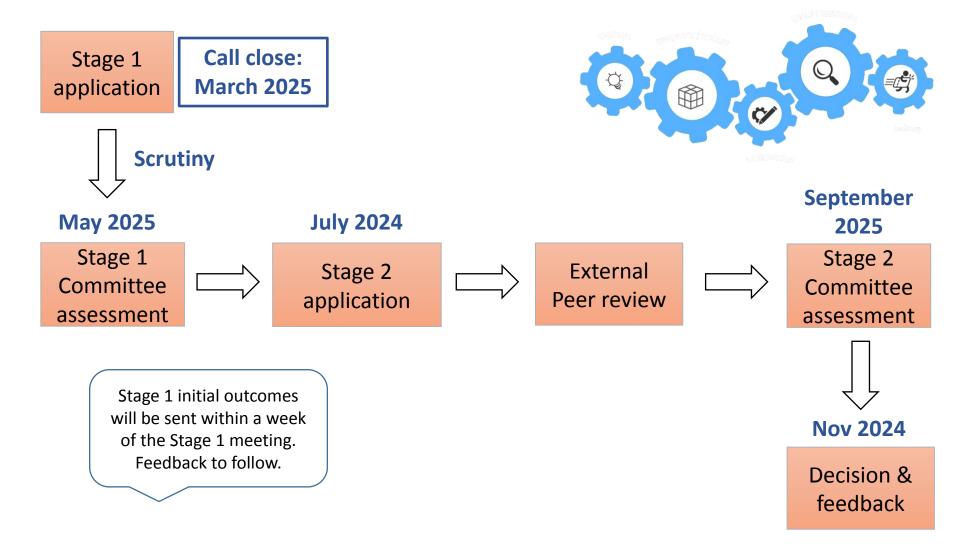
Invite – Exceptional proposal addressing an important research question with a clear path to patient benefit. Only a few minor fixable faults.		Invite to Stage 2/ recommend for funding
Invite – Excellent proposal with several minor fixable faults.		
Invite – Good proposal with a clear path to patient benefit but a few major fixable faults or multiple minor fixable faults		
Reject – Too many major fixable faults/concerns.		Reject
<b>Reject</b> – Poor quality proposal with questionable potential for patient/public benefit and several major concerns regarding methodology and delivery of the research.		
<b>Reject</b> – Poor quality proposal with poorly defined research question and weak methodology. Unlikely to lead to patient/public benefit.		







## **Application Process Competition 56**



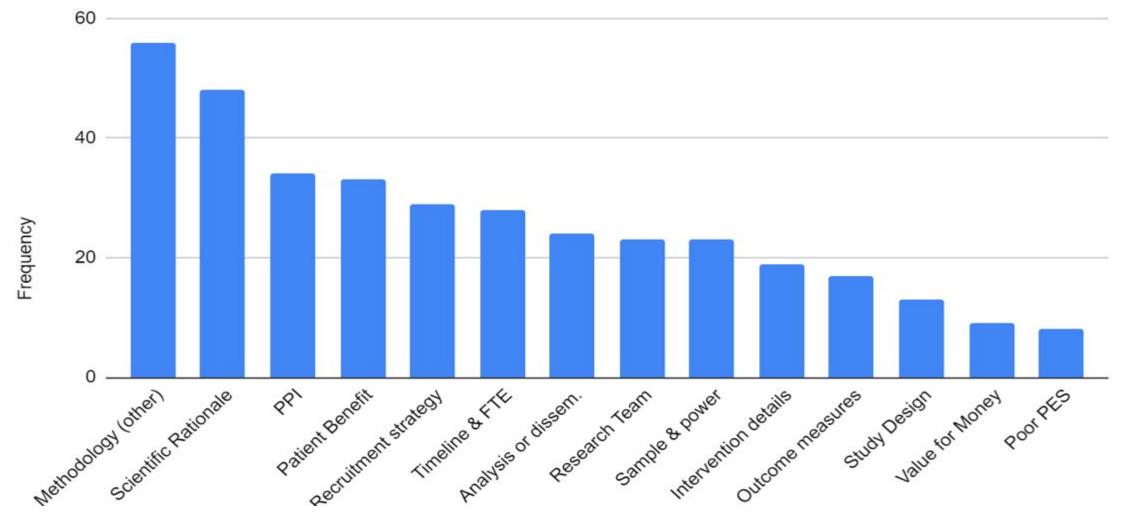


### What does a good application look like?

- Identify a research question with a trajectory to patient benefit
- Structure a coherent and feasible research plan
- Develop a robust methodology based on sound scientific rationale
- Assemble the right team
- Collaborate with relevant stakeholders
- Involve service users (PPI)
- Include a clear dissemination strategy



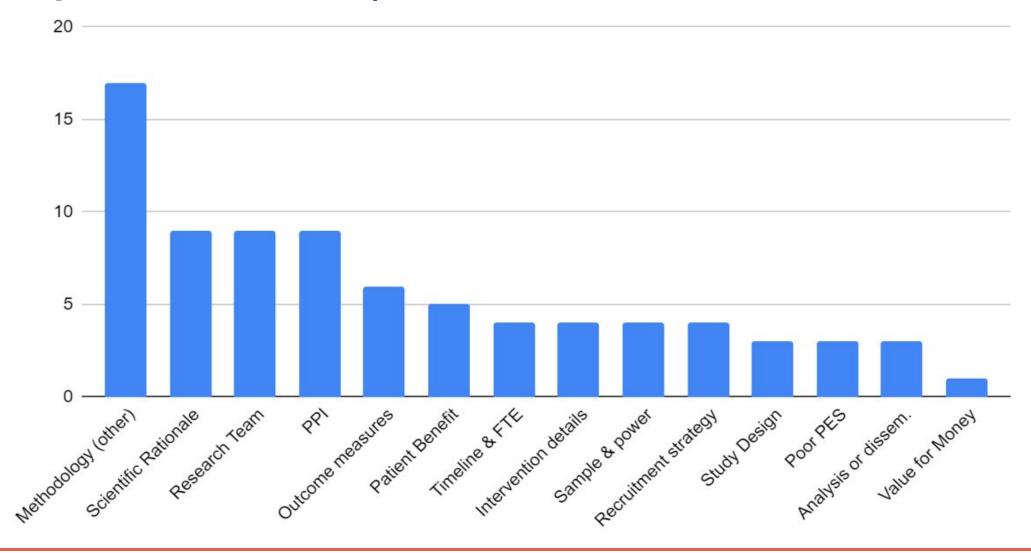
## Common points of feedback for rejected applications at Stage 1 (Competition 51, N = 89)



Categories relate to insufficient detail, clarity, evidence, justification or too ambitious.



## Common points of feedback for rejected applications at Stage 2 (Competition 50, N = 20)





### Common points of feedback

#### **Research question**

- Failure to demonstrate importance of topic or how to reach patient benefit
- Research question is ill-defined, unfocused or unsupported by preliminary data
- Omission of critical literature references
- Insufficient patient and public involvement in defining the research question

#### Research plan

- Detail of the intervention lacking, or conversely too technical
- Timescales too short or too long and lacking justification
- Insufficient recognition of potential problems
- Inappropriate or unjustified costings



### **Common points of feedback**

#### Methodology

- Insufficient methodological detail to allow the Committee to assess the scientific quality of the proposed research
- Methodology unsuitable, flawed or unlikely to yield relevant results
- Inappropriate outcome measures
- Inappropriate statistics or health economics analysis
- Concerns with the recruitment, sampling and overall feasibility

#### **Research Team**

- Areas of expertise lacking in the research team often health economics and statistics
- Senior colleagues included at 1% FTE without justification



#### Other considerations

#### PPI

- Should be a constant thread throughout the proposal.
- Ensure your plain English summary is clear and understandable.

#### **EDI**

- The research plan should make clear how inclusion and the impact on under-served groups have been considered in the proposed work.
- Application guidance is <u>available online</u> and a webinar was conducted to help guide applicants in designing research to meet this requirement.

## **Dissemination strategy**

- A clear dissemination strategy is vital to achieving patient benefit.
- Should be specific to the output and how it could be integrated into care/practice.





## Accessing the NIHR RSS and how researchers are supported





#### Vision and structure

The NIHR RSS provides support and advice to researchers from all backgrounds and organisations in health and social care, not only to develop funding applications but throughout the research pathway.

- The NIHR RSS offers a core national service delivered by eight Hubs. The service is based on expertise offer, not location.
- Each Hub is a partnership of research groups, organisations, and clinical trials units with expertise in applied health and care research.
- Three Hubs deliver the core services <u>and</u> host specialist centres in social care (Lancaster), and public health (Newcastle and Southampton).
- These hubs also host specialist centres





### **Overview of RSS Activities**

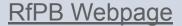


By offering expertise in research design, collaboration and implementation, all RSS Hubs and Specialist Centres, regardless of location, can help researchers to:

- Develop appropriate methodological approaches
- Plan projects, teams and budgets
- Plan for implementation and impact
- Improve writing techniques/pitching an application
- Include patient, public, service user and community involvement and engagement in the application
- Maximise equality, diversity and inclusion (EDI)
- Collaboration and delivery of research



## Useful resources



#### Applicant guidance

- Guidance for Applicants
- Supporting Information for Applicants
- Stage 1 template application form
- Finance guidance

#### Other guidance

- Guidance on funding limits
- Frequently asked questions
- Plan for impact in your research
- Make a strong application
- <u>Inclusive research guidance</u>

Contacts:

RfPB Programme:

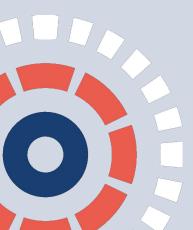
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## Any questions?

