

Making a good funding proposal (*as an early career researcher*)

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This session ...

- Brief introduction to the NIHR RfPB Programme
- An approach that works for me ...
- Tips for a successful application to NIHR RfPB
- Learning from experience (and the Matthew Effect)

The NIHR RfPB Programme

- Response mode - flexibility on design and topic
- Three funding tiers (to £150k, £250k and £350k)
- Eight Regional Advisory Panels
- Three funding competitions per year
- Two stages (feedback from panel at stage 1; external reviews at stage 2)
- Success rate at Stage 2 now over 40%

NIHR RfPB and 'early career' researchers

- The programme welcomes a wide range of quantitative and qualitative study designs in health and social care research
- Committed to capacity building - early career researchers are actively encouraged to apply as PIs, with support from an appropriate team.
- RfPB has trialled (and now rolled out) enhanced feedback '**detailed information on how close evaluation scores were to the funding threshold**' to applicants

Review of Tier 3

- Review of Tier 3 projects published on RfPB website
- A total of 21 projects funded over 3 competitions totalling £3m.
- Developed 4 'types' of research seen within Tier 3 and identified the expected pathways to patient benefit

Funded projects included:

- 3 systematic reviews
- 7 developing and refining interventions
- 1 meta-analysis
- 1 realist synthesis
- 1 economic evaluation
- 6 secondary data analysis (including developing predictive models and needs assessments)
- 2 diagnostic accuracy studies

Examples of £150,000 projects

- Observational studies
- Developing and refining interventions
- Developing new scales or outcome measures
- Exploratory studies that might provide insights into an intractable problem
- Additional follow up of patients in a completed clinical trial
- Post-market surveillance for unknown side-effects of a drug (Phase IV trials)
- Systematic reviews where the number of relevant studies is likely to be limited

What does a funding panel look like?



- The RfPB regional panels typically comprises ~20 members
- Response mode panels tend to have broad, general expertise in research (so....)
- Range of expertise
 - Methods (stats, qualitative, Health economist, trialists)
 - Academic Practice/ Clinical (academic GP, surgeon, physio, nurse, psychiatrist, social care researchers)
 - Patients and Public

RfPB Stage 1: the first hurdle

Stage 1 Assessment Panel. Three panel members will score your application independently and lead discussion

1. Does this research matter to patients and the NHS?
2. The appropriateness of the method to achieve each of the objectives? Does the proposed method imply a burden for patients that is unwarranted? Are the endpoints (such as the outcome measure in a clinical trial) sufficiently patient oriented?
3. The amount of improvements required to make a Stage 2 application competitive. Fixable faults?
4. Does the panel think sufficient promise to want to see at Stage 2, with peer reviews?

Stage 2

- If invited to Stage 2, Stage 1 application copied across to standard application form (SAF)
- Applicant revises Stage 1 in light of panel comments and completes other sections
- Applicants given 6 weeks to complete for current round or defer until next
- Stage 2 applications sent to external reviewers
- Stage 2 applications assessed by panel

PPI



Stage 1 – looking at the wider picture

- Focus on question
- Patient burden/experience
- Patient relevant outcomes

Stage 2 – focus on the detail of PPI plans

GOWME table – linking goals, objectives
and methods

(An approach that works for me...)

STATE OVERALL AIM/ GOAL OF STUDY

Objective	Why?	Why this team?	Methods	Evaluation/ link (how will you know this is achieved?)
Objective 1				
Objective 2				
Objective 3				
Objective 4				

GOWME Goals/Aim and Objectives

- Goal/ overall aim: broad, overarching
- Objectives: the steps involved to accomplish your aim
 - Each is specific and measurable (often 3 or 4 objectives. Often revised during the process)

GOWME Why?

- Where is the appetite for the research findings? Who wants to know?
- Justify need for study eg clinical need, patient and public priorities, gaps in literature, statistics, cost to NHS? Cochrane review? James Lind Alliance Priority setting partnership
- Why are you/ your team the people to do this?


GOWME Methods and Outcomes

- Methods and outcomes: how are you going to do this? Flows from the project description and objectives, describes activities, participants, sampling and recruitment. Scope must be reasonable.
- Outcomes – long and short term, measurable results

GOWME Evaluation

- How you will know if you have accomplished each of your objectives, defines the criteria for evaluating success, describes means of evaluation, who is going to evaluate, significance of results
- (and how this links to next objective?)

STATE OVERALL AIM/ GOAL OF STUDY



Objective	Why? Background	Why this team? Team roles	Methods Expressed with objectives	Evaluation/ link (how will you know this is achieved?) Coherence ..
Objective 1				
Objective 2				
Objective 3				
Objective 4				

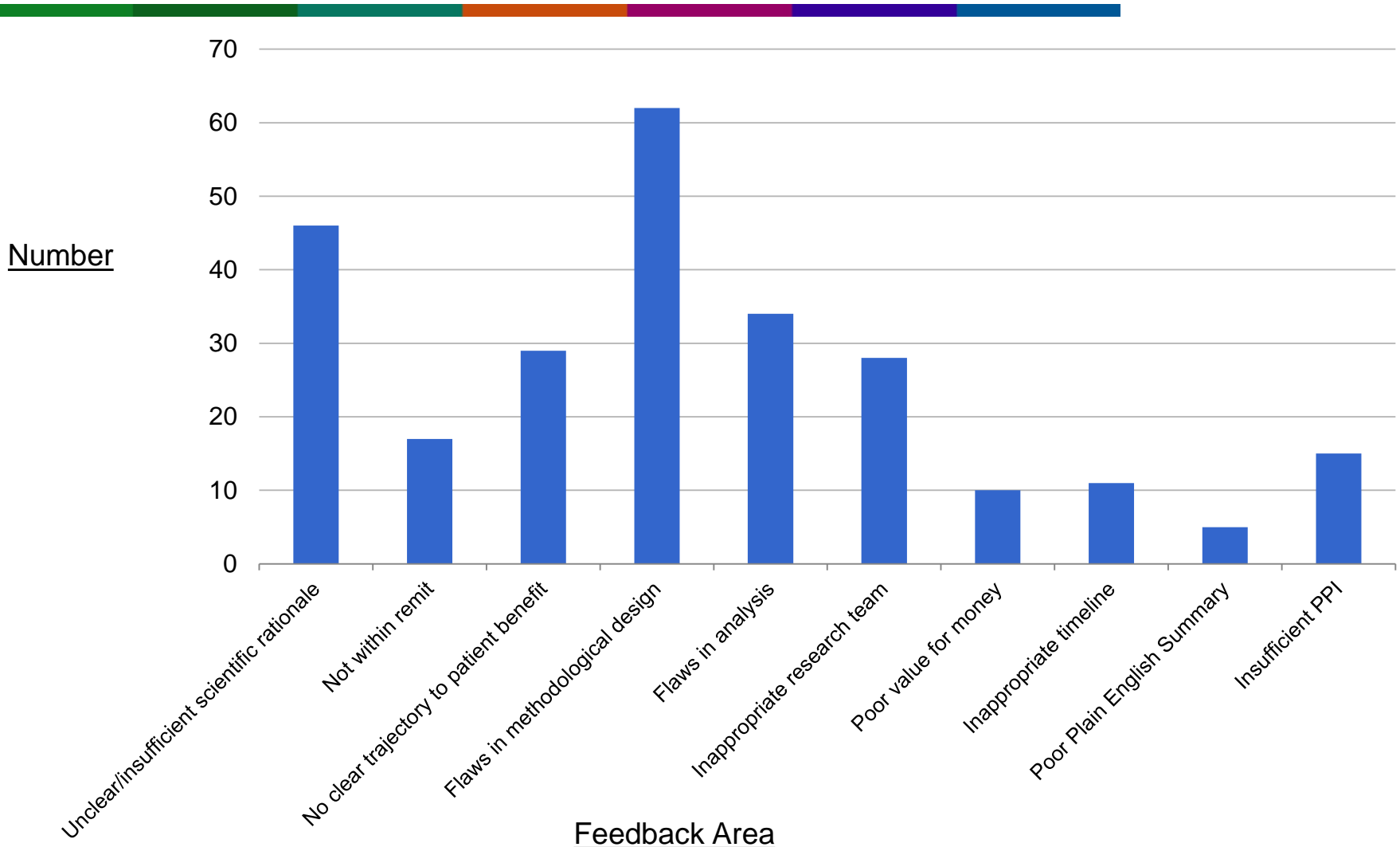
Getting the applicant team right

- When the PI is 'junior' make it clear which senior(s) are providing support and give this person a suitable % FTE (or if part of their department role, say so).
- Senior colleagues at 1% is not usually well received by panels (and may look suspicious ...)
- Team needs to reflect the nature of proposed work – gaps in methods skills and under/over costing will often be picked up by panel (use GOWME)
- Each co-applicant needs a clearly described role – if the panel cannot determine what each member is doing it undermines application (use GOWME)

Feedback favourites

- **Detail in the methodology** lacking or appropriateness of the design questioned
- Overall **lack of clarity and focus** of the application
- Inappropriate **outcome measures**
- Particular areas of **expertise lacking** in the research team
- Insufficient quality of the **patient and public involvement**
- Justification or **detail of the intervention** lacking
- Insufficient detail provided in the **background information**
- Inappropriate **statistics or health economics** analysis
- Concerns with the **recruitment, sampling and overall feasibility**
- Questions regarding **project impact, timescales, generalisability or dissemination**

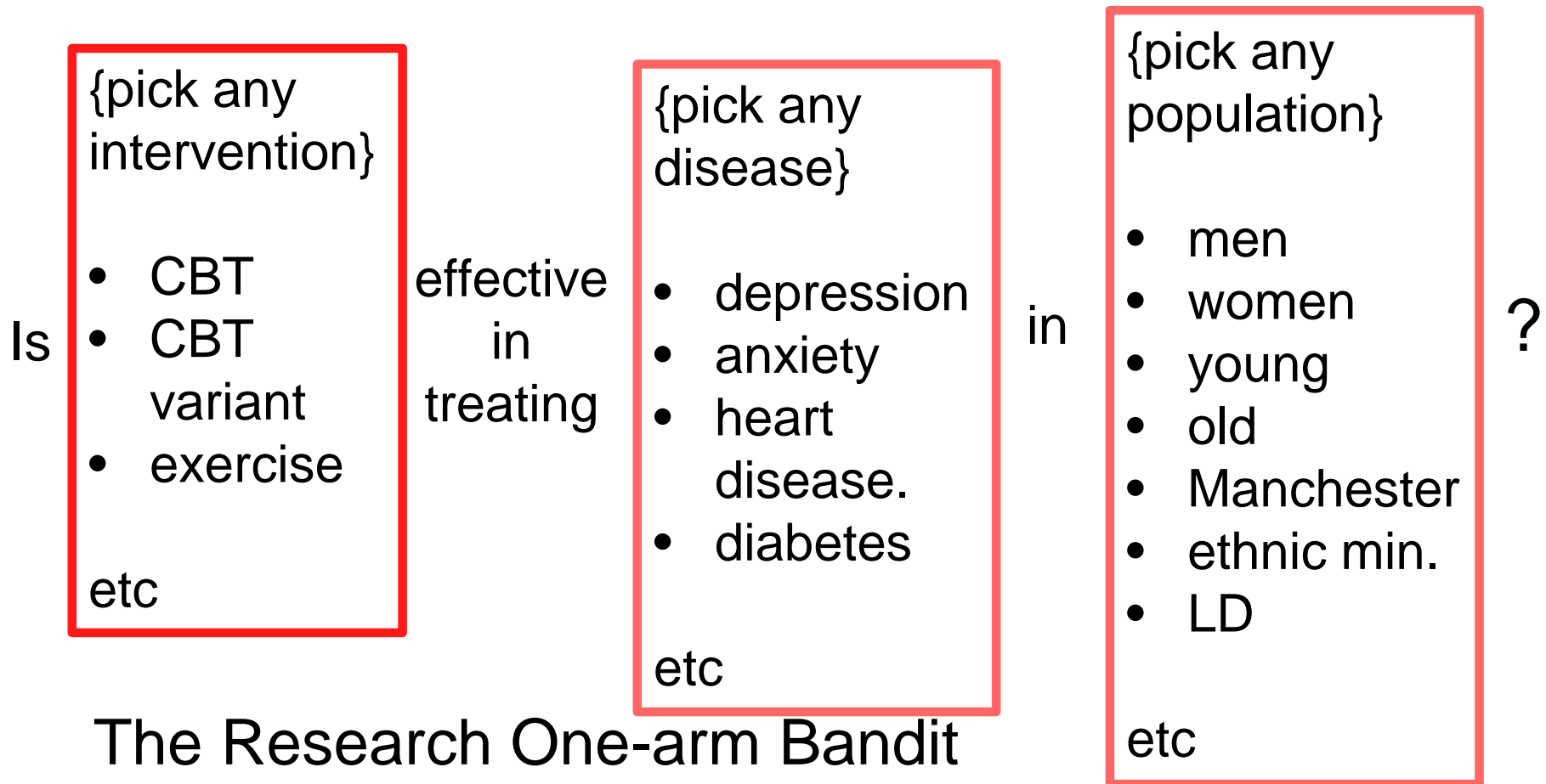
Stage 1 Feedback



Reasons for rejection include

- Failure to demonstrate that **the topic matters**
- Research question is ill-defined, unfocused or unsupported
- **Omission** of critical literature references
- Research team lacks **relevant experience**
- **Methods** unsuitable, flawed or unlikely to yield results
- **Insufficient detail** to convince reviewers that the team knows what it is doing
- Insufficient **recognition** of potential problems eg recruitment
- Contradictions, unclear flow between objectives and research design (poor proof reading)
- Inadequate **response to Stage 1** panel feedback

RfPB: 'me too' applications?



Summary

Three key things for a successful application

- **Patient benefit** has to be very clear (or path to patient benefit)
 - Including specifics about the numbers of people affected
 - Evidence that the question is important to patients/public
- **Methods** must be clear
 - What is the research question/ aim and objectives?
 - Will the proposed project answer the research question?
- **The Team** needs to be convincing
 - Does not need to be the great and the good but needs to have the right expertise; research as well as clinical skills are important
 - Tiny amounts of time from seniors does not convince the panel project will be delivered

Sources of advice

- Research Design Service
- Team members and mentors
- Admin, finance and HR in your own institution (many require at least a couple of weeks notice – earlier the better)
- NIHR RfPB Programme Managers



Other Resources

- Colleagues with experience of the programme as grant holders or panel members (if current panel members they will be out of the room due to conflicts of interest)
- NIHR RfPB (September 2018)
 - New guidance for early career researchers
 - Case studies of career development with RfPB funding



New Investigators – case study


- RfPB is developing further guidance and case studies on new investigators

Research

- Journals Library
- NIHR Dissemination Centre
- Suggest an idea for research
- Career development awards
- NIHR studies
 - Invention for Innovation
 - Policy Research Programme
 - Programme Grants for Applied Research
 - Research for Patient Benefit
 - The story of RfPB
 - Research idea
 - Application
 - Panels
 - Our place in the story of patient involvement
 - Qualitative research
 - Clinical trials
 - Capacity building

New investigators can't apply for research funding... can they?

Justine Tomlinson is a specialist pharmacist and doctoral training fellow at Leeds Teaching Hospitals NHS Trust and the University of Bradford. She successfully applied for an RfPB award during her PhD and has shared her advice to encourage other doctoral students to apply.



Why did you decide to apply for research funding?

Since I qualified as a community pharmacist in 2010, I have been involved in numerous audits, quality improvement projects and patient surveys. However, I hadn't done anything large scale or that could be considered primary research.

I had always aspired to work towards a PhD. In October 2016 I began a new, exciting research post that was my absolute dream role – research combined with a clinical role and teaching.

To allow me to conduct the research that I felt was necessary for my PhD, I knew that I needed to apply for funding. I hadn't really considered who could and could not apply and whether I would be eligible – I just knew this was something I needed to explore further.

What is the research idea that you applied for funding to address?

My main research interest is continuity of medicines at transitions. We know that older people (particularly those with polypharmacy and multimorbidity) have multiple medicines changes when they have a hospital stay, which can lead to confusion and anxiety after discharge. This often leads to re-admission or poorer quality of life. I personally feel that more could be done to support this vulnerable population, and I struggled to find many studies exploring this issue from the perspective of patients.

My RfPB project involves investigating medicines related care after discharge for older

Resources and links

- [Research for Patient Benefit](#)

The Matthew Effect



“The observed tendency for winners of earlier grants to try their luck in later competitions in greater numbers than non winners suggests that funding agencies could consider outreach efforts aimed at reducing this gap.

One costless measure that agencies may take is providing unsuccessful applicants **with detailed information on how close evaluation scores were to the funding threshold**, which may prevent near-winners with good past proposals from concluding that future odds are too low for investing time and effort in a new application”.

Thijs Bol, Mathijs de Vaan, and Arnout van de Rijt **The Matthew effect in science funding** *PNAS* April 23, 2018. 201719557;
<https://doi.org/10.1073/pnas.1719557115>

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