# Developing an NIHR programme grant to examine safe staffing in ICU

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University of Plymouth
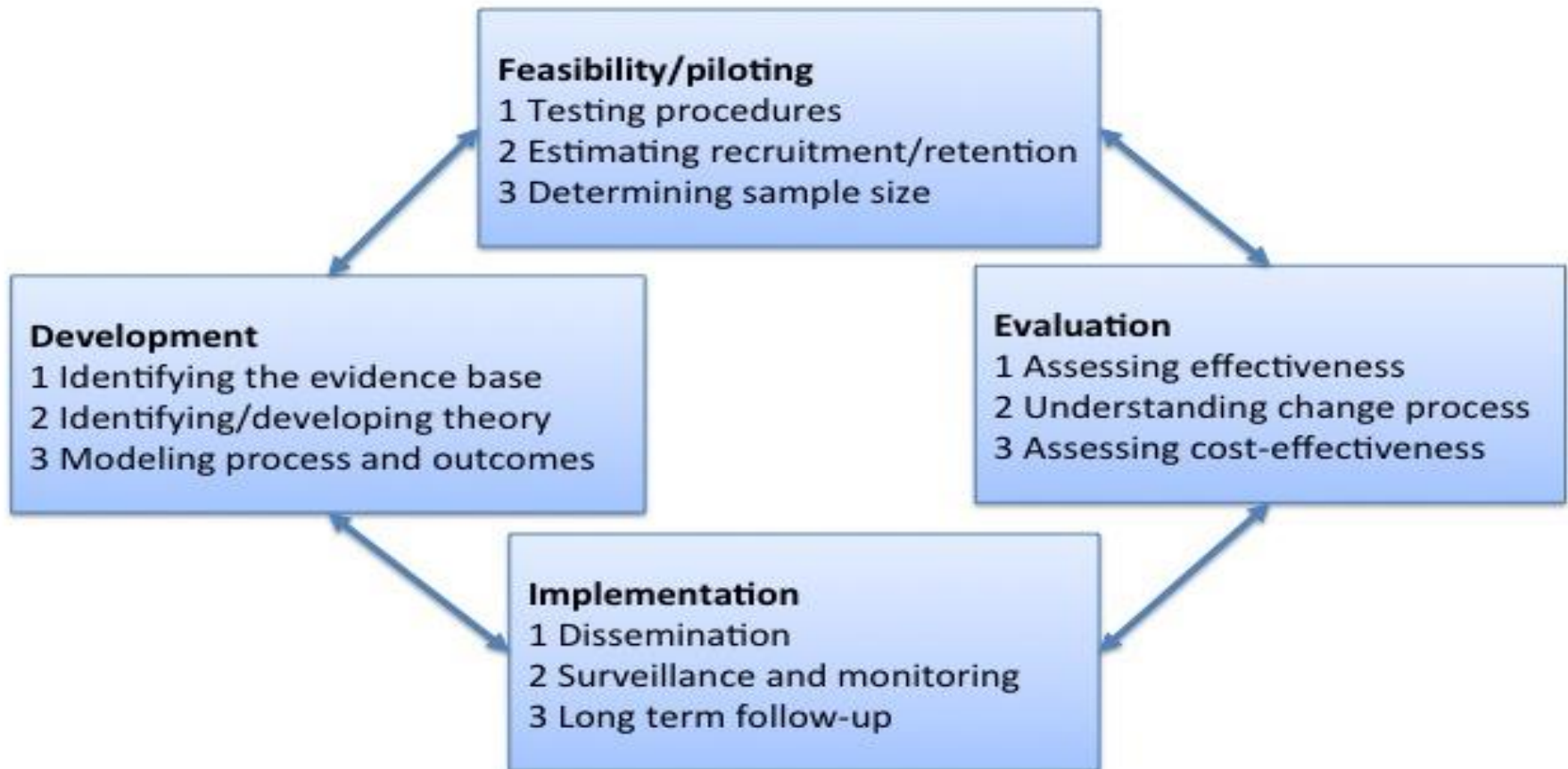Monash University, Melbourne

# Direction of travel

- Developing research ideas into a programme

- Seeking funding for programme components

- Building in development opportunities

- Achieving clinical and academic balance

- How to make yourself attractive to a research team

- A grant reviewer perspective…

# Developing a programme of research

- Identify the eventual goal:

    - Patient outcomes improved?

- The current evidence: Systematic Review/Meta Analysis

- Theoretical context: theory building/testing

- Patient and Public perspectives (PPI) – genuine!!

- Identify the research questions/hypotheses

- Pilot and/or Feasibility studies

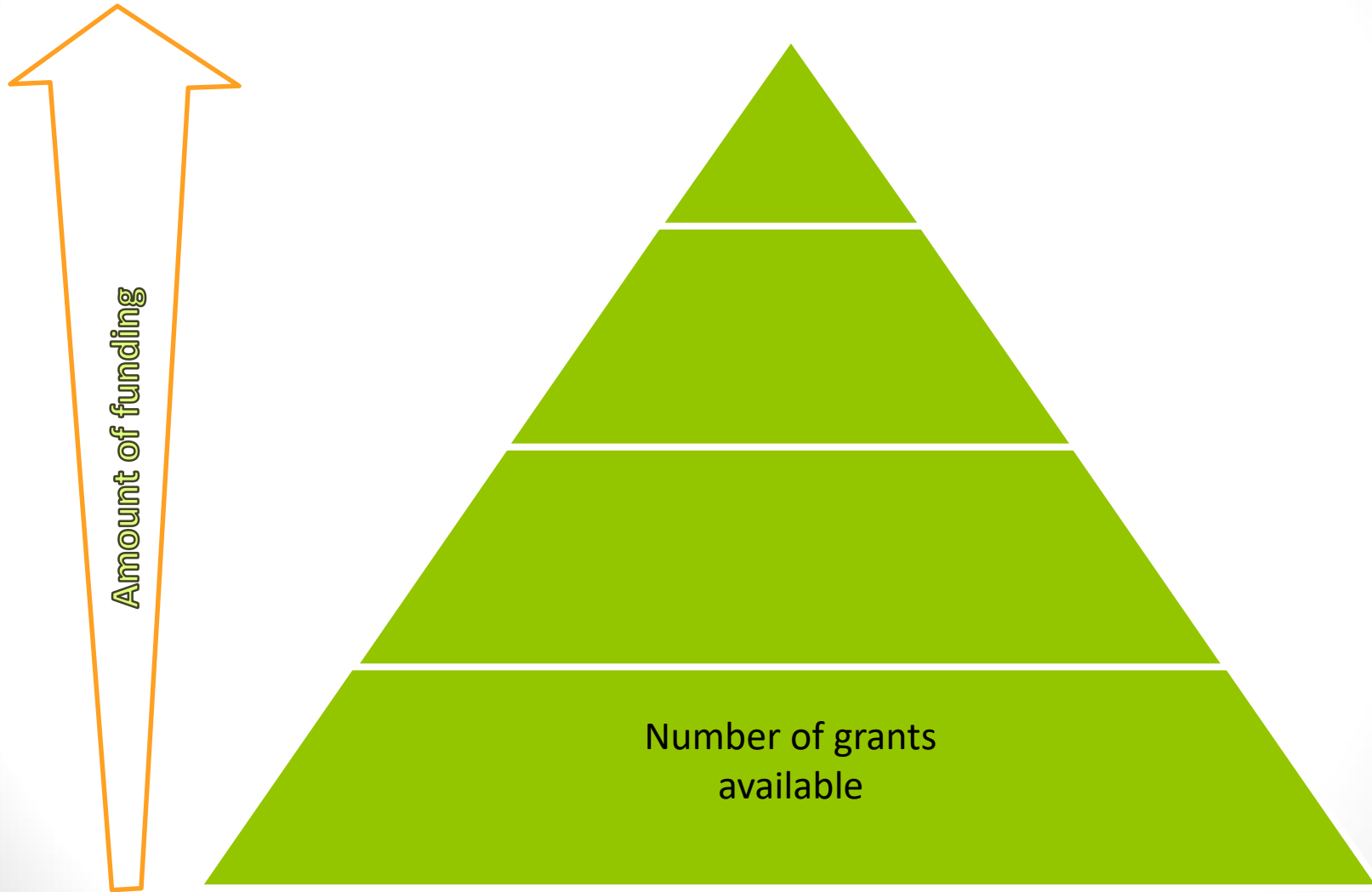For NIHR use a framework e.g. MRC Complex Interventions
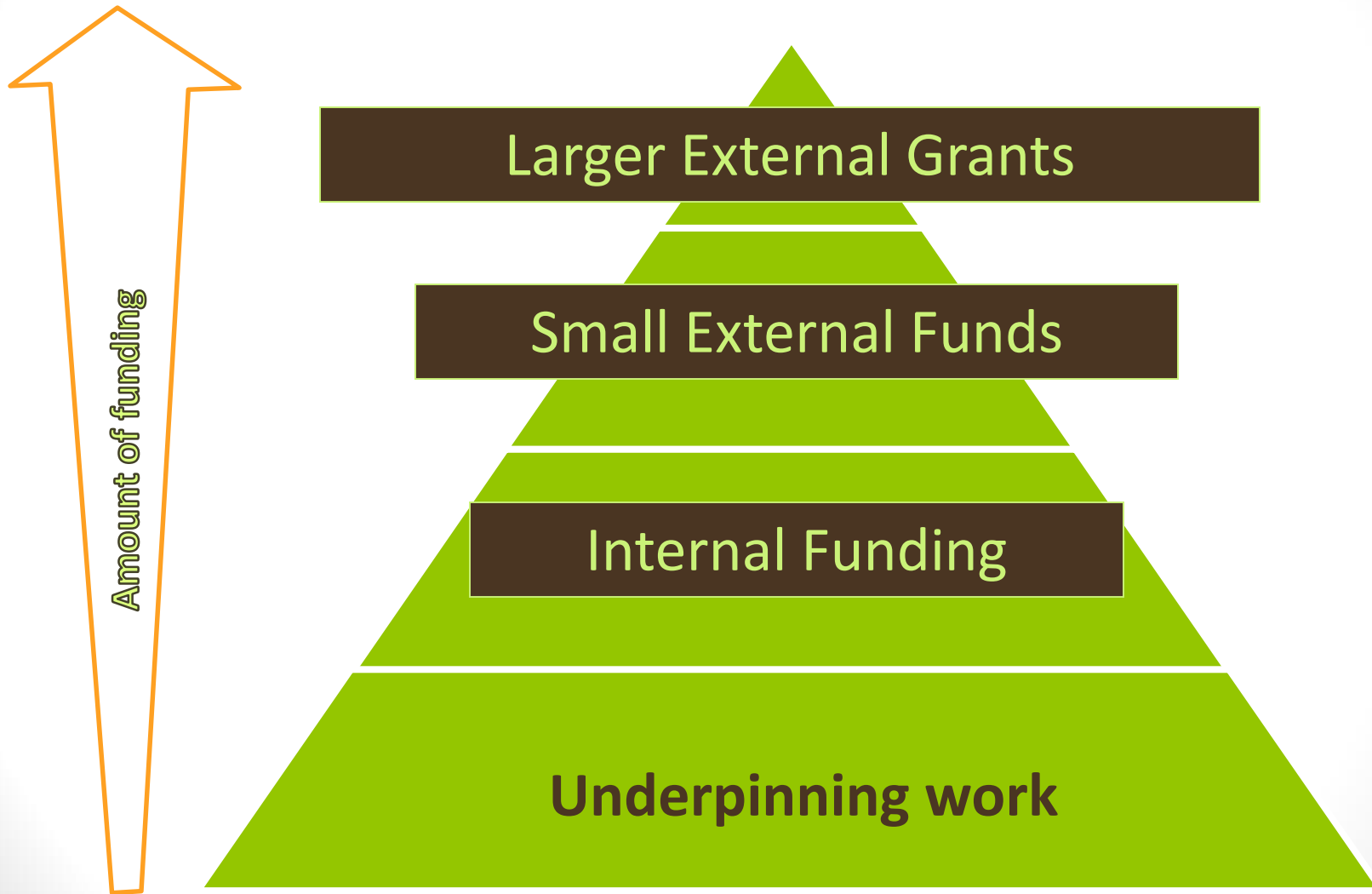
# Complex Interventions Framework (MRC 2008)



**Feasibility/piloting**
1 Testing procedures
2 Estimating recruitment/retention
3 Determining sample size

**Development**
1 Identifying the evidence base
2 Identifying/developing theory
3 Modeling process and outcomes

**Evaluation**
1 Assessing effectiveness
2 Understanding change process
3 Assessing cost-effectiveness

**Implementation**
1 Dissemination
2 Surveillance and monitoring
3 Long term follow-up

# Links to wider initiatives

- NICE 'do not do' recommendations

- James Lind Alliance:
    - brings patients**,** carers and clinicians together to identify and prioritise the Top 10 uncertainties, or 'unanswered questions', about the effects of treatments that they agree are most important

- Core outcome datasets such as the COMET initiative

# Seeking funding..

Amount of funding

Number of grants
available

# Stages in the funding process

# Underpinning work

- Funding 'in kind' via employer
  - Time
  - Travel
  - Stationary/IT resources etc
- Scholarships
  - Professional organisations, Trusts/charities
  - Targeted: doctoral/PG studies, topic area, travel, woman graduates
  - Methods training

Used to develop larger studies: sample size calculations; identify research questions; develop intervention

# Internal grants

- Source = Employer (NHS Trust, Uni)
- Emphasise the benefits to the employer as well as you
- Indicates managerial support (explicit or implicit)
- Provides opportunities to publicise the programme activity
- 'Funded by...' adds a level of credibility to the work

**It's worth the effort!**

# Small external

- Studies
- Travel Fellowships
- Projects/consultancies

Often targeted to specific areas

Focus on **support** and **track record** of co-applicants

Useful to develop team track record

# Larger External Grants

- NIHR & ESRC/MRC
- Charities: BHF, BLF, Marie Curie, Cancer Research UK, Health Foundation, Wellcome

Focus on:   **track record** of **Chief Investigator**

**topic and significance, timeliness**

**feasibility**

**team track record** (publishing & grants)

# Successful funding applications

- … matching project to funding source
- … building a research team
- … doing the legwork
- … 'second guessing'
- … the application

# The right funding source

- Your idea or the funders?
- Match the stage of the work with the right funder (e.g. pilot work or multi-centre study)
- Expected outputs

# The right team

- Track record:
  - ££s,
  - project management
  - outputs
  - profile
- Methods and stats expertise (PI/AI or honorarium)

# The legwork!

- Application template
- Team responsibilities for submission
- Costings – find out about the process early on
- Former successful bids – what types of studies have been funded previously?

# Second guessing …

- Previous funding record

- Core aims of the funder (website)
- What is/isn't funded – area, methods, investigators, innovation?
- Expected outputs (publications/conference presentations or 'product')

# ALL Grant applications

- The study
  - Background
  - Significance
  - Methods – level of detail depends on the funder
- Value for money
  - Costings
  - Rationale
  - Return on investment – outcomes and outputs

# Background & Significance

- Establish the **general territory** (real world AND research) in which the research is placed.

- Add **policy context** – current and future

- Describe the **broad foundations** of your study, including some references to existing literature.

- A question that needs to be answered

- A problem outside of the research setting – requires a research study rather than QI intervention

**answering the "so what" question**!

# Building in development opportunities

- Link to clinical academic pathway at the Trust

- Research capability building….

- PhD studentships nested into the grant

- Early post-doc opportunities

# Developing the research team

- Clinical and academic balance: need critique!

- Clinicians with academic experience

- Methods and stats expertise

- Track record:

  - Scholar

  - Researcher

  - Grant writer

# Developing your track record

- **A scholar – intellectual leader!**
  - Publications – eminent people may peer review your work …. Sharpens your work. First author opps…..!!
  - Engaging in debate – methods or specialism
  - Progress – single/multi/moving up the author list
  - Your ability to engage with, and advance, current debates, clinical problems, research challenges
  - Presentations
  - Grant review panels
- **A researcher**
- **A grant writer**

# Developing your track record

- **A scholar – intellectual leader!**
  - Publica
    .... Shar
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  - Your ab
    clinical
  - Presen
  - Grant
- **A resear**
- **A grant**

**Publication track record**
- Discuss authorship at beg of project
- Be prepared for things to change
- Rules vary (1ˢᵗ, 2ⁿᵈ last etc)
- Be realistic about your contribution
- Stay in contact post-project – or you may become invisible
- Mention in acknowledgments is important

"*A scientist who does not publish is like an artist who does not produce works of art*" *(Vetterli)*

# Developing your track record

- **A scholar**
- **A researcher**
  - Evidence of competence
  - Relevant experience
  - Develop collaborations at an early stage
  - Co-investigator with experienced team
  - Financial and personnel management (if relevant to your intended role – Site Lead/PI…)
  - Supervision, time management
- **A grant writer**

# Developing your track record

- **A scholar**
- **A researcher**
- **A grant writer**
  - Across the relevant lit
  - The right team, management plan
  - Command respect and trust
  - Understanding what the funder wants
  - Following the rules

# Apply for funding?

- Suitability – d/w mentor

- Read the small print!

- Sign up to funding alerts (e.g. RCN bulletin)

- Get to know annual funding cycles

- Plan ……

- Timing:
  - don't waste time with unlikely applications;
  - avoid delays to data collection

- Think ahead: develop track record with supervisors (if appropriate to your post-Masters/PhD plans!)

- Who will benefit from study outcomes? Target accordingly ….

# Reviewers' perspective ……

- Are the researchers up to the job?

- Do they have the right team, experience and infrastructure?

- Are they at the forefront nationally? Internationally?

**[Medical Research Council]**

# Reviewers' perspective ……

**Welcome Trust** – assessment of PI track record

- *Not supportable*: the PI is not appropriate for the scheme or is not equipped to deliver the proposed research
- *Satisfactory*: The PI has a satisfactory track record and has potential for delivering the research
- *Competitive*: the PI has a very good track record and is very likely to deliver the research
- *Excellen*t: the PI has an excellent track record and is highly likely to deliver the research
- *Outstanding*: the PI has an outstanding track record and is highly likely to deliver the research

# Reviewers' perspective ……

NIHR Clinical Doctoral Research Fellowship scheme

- The applicant

- The supervision team

- The programme of work
  - **The study**
  - Academic training
  - Clinical training

**[Medical Research Council]**

# Summary

- Takes time to develop research programmes

- Worth the investment...

- Lengthy application process

- Genuine PPI is essential for NIHR (*if not, why not?*)

- Building blocks are essential

- Team is as important as the research

# Questions?

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