

Health & Medical Research Fund (HMRF) 2019 Call

What do you need to have in your application?

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Declaration

All content of this presentation is my personal opinion.

I had both success and failures in my HMRF applications.

Preparation of an Application

- Assessment criteria
- Help your reviewers
- Pitfalls
- Re-submission

Assessment Criteria

1. Originality & impact
2. Clarity of research question, aims, objectives & hypotheses
3. Subjects & methodology validity & feasibility
4. Outcomes & data analysis
5. Research capability (required expertise)
6. Budget justification
7. Ethical & safety consideration

1. Originality & impact

- What is important & new (knowledge gap)?
- Relevance to HK & HMRF thematic priority?
 - Identify the theme & sub-theme, enter the code
 - Explain how your research addresses the specific priority theme & health problem
- What is the translational potential/value?
 - Health of individuals and population
 - Health policy or services
 - Patient/caregiver/service burden or cost

2. Research question, aims, objectives & hypotheses

- Title should reflect the research question
- Aims to explain the “so what”
- Objectives describe specific steps to achieve aims
- Hypotheses on the likely findings

3. Subjects & methodology

- Consistent with question & objectives
- Subject selection & exclusion criteria, clear case definition, representativeness
- Sample size powered for 1^{ry} outcome & expected effect
- Study design & method are appropriate & clear
- Intervention, if any, is clearly described & feasible
- Data collection method & study instruments are detailed, valid & feasible
- "RAMBO" are carefully addressed

4. Outcomes & Data Analysis

- The (one) primary outcome is defined
 - Addresses the most important objective
 - Basis for sample size calculation
- Secondary outcomes relevant to the objectives
- Confounding variables to be measured
- Specific statistical tests to answer each specific objective & test specific hypothesis
- Sufficient details on qualitative data analysis/ other complex analysis, e.g. CEA

5. Research capability

- A team of PA & Co-A with required expertise & experience, role of each member
- Pilot study/ previous study results
- Access to subjects/ specimen/data
- Contingency & back-up plan
- Facilities for data collection, intervention, statistical analysis etc.

6. Budget justification

- Staff level & workload requirement
- Equipment/computer/software for the research
- Investigations & blood tests
- Allowance for subjects
- Cannot pay investigators (**Research staff, e.g. RA / PDF, can be supported provided they are not supported by other funding**)

7. Ethical & safety consideration

- Ethics approval by IRB
- Ethical dilemma, e.g. delayed treatment x control
- Management of anticipated risks

Help your Reviewers (1)

- A structured, informative & convincing abstract
- Title that is succinct & consistent with study objectives & plan
- Introduction
 - Importance & relevance of the problem
 - Up to date, relevant & comprehensive literature review on concepts & KAP
 - State the knowledge gap
 - Justify novelty & need of your study

Help your Reviewers (2)

- Aims, objectives & hypotheses
 - State clearly, use sub-headings, numbers & bullets
 - Not too many aims & objectives
 - Hypotheses on the likely findings in relation to the objectives

Help your Reviewers (3)

- **Plan of Investigation**

- Sufficient details to assure validity & feasibility
- Study setting & site selection
- Study design & method statement
- Subject recruitment & data collection flow diagram
- Gantt chart on study timeline
- Attach study instruments (bilingual)
- Check list of information recommended by reporting guidelines, e.g. CONSORT, STROBE, CROEQ

Help your Reviewers (4)

- Potential applications - be specific
 - Health of patients/ general population
 - Policy
 - Service quality, effectiveness & CE
 - Practice
 - Further research
- Potential for scaling up the impact
- Plan of dissemination & implementation

Pitfalls – Originality & Impact

- Out of scope/ thematic priority
- Problem not important or very uncommon
- Lack of novelty – first study in HK/ specific population is insufficient
- Irrelevant/ incomplete literature review
- Lack of understanding of current practice
- Too ambitious/ many objectives
- Unrelated or high-risk pre-requisite study
- Lack of hypotheses - fishing exercise

Pitfalls - Science

- Incoherent objectives/ outcomes/ plan
- Inappropriate design/ research method
- Sample size calculation not based on 1^{ry} outcome/ realistic effect size
- Lack of methodological details
- Data analysis too general/ do not match objectives
- Premature/ superficial CEA
- Unclear presentation/ English





Planning a HMRF Application

- Start early, discuss with stakeholders & colleagues
- Read the Guidance Notes
<https://rfs.fhb.gov.hk/>
- Register as principal applicant
<https://rfs.fhb.gov.hk/eGMS>
- Invite & involve relevant co-investigators
- Apply for IRB ethics approval
- Carry out a pilot

Wish You Success!