

Developing an implementation research proposal

Session 1:
Writing the Introduction section

Learning objectives

- After completing this session, you will be able to:
 - Describe the components of an IR proposal
 - Write an introduction to your proposal
 - Write the research question(s) for your proposal

What is a research proposal?

- A document that describes:
 - The proposed research
 - Why it is being conducted
 - The research design
 - The expected impact
- Required for most grant applications
- Judged by a committee
- To be effective, you need to know:
 - What you are doing
 - Why you are doing it
 - When you plan to do it
 - How you plan to do it

What is different about an IR proposal?

IR proposals often differ from conventional research proposals in relation to the:

- Origin of the research problem
- Involvement of the end users in the research process

These differences arise from the need for IR interventions to help:

- better inform health care service quality improvement efforts
- facilitate uptake by end users
- generate 'generalizable' knowledge so it can be applied across settings
- engage multiple sectors, e.g. including epidemiology, social science and health economics
- develop practical solutions and facilitate policy recommendations

Characteristics of an IR proposal

- Each funding agency has its own format and requirements
- Requirements vary and not all agencies will require all components included in this session
- Agencies may require a letter of intent (LOI) for preliminary screening to ensure your proposal will align with their needs
- The LOI includes the same components as a research proposal but with less detail

Components of an IR proposal

Introduction

Research design

Project plan

Impact

Supplements

Introduction

The introduction to your proposal includes the title page, project summary, table of contents, rationale, and statement of the problem, objectives and research question(s), and review of literature (synthesis of existing knowledge).

Introduction

Title page

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Rationale

Statement of the
problem

Research question(s)

Literature review

Research design

The research design section includes: Research design, research methods, data collection, data analysis, quality management, participants and ethics.

Research design

Research design

Research method

Data collection

Data analysis

Participants

Quality management

Ethics

Research design

- Describes the nature or structure of the research
- Describes the methodology - qualitative, quantitative or mixed methods; between- or within-subjects; experimental or correlational; individual or collective case study etc.

Research design

Research design

Research method

Data collection

Data analysis

Participants

Quality management

Ethics

Project plan

The project plan includes:
implementation plan, research
team and budget.

Project plan

Project plan

Research team

Budget and
justification

The impact section contains the following: Monitoring and evaluation, capacity building, and a dissemination plan.

Impact

Monitoring and
evaluation

Capacity building
Dissemination plan

Supplements

- Supplements include: Project summary, table of contents, references, appendices, and CVs of investigators.
- Note that project summary and table of contents are placed at the beginning of your proposal but are written after you have completed the other sections.

Supplements

Project summary

Table of contents

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References

Appendices

CVs of study team

Writing your Introduction



What is an introduction of an IR proposal?

- Outlines what is being studied and why (i.e., the rationale)
- Builds an argument for the current study
- Includes the statement of the problem, general objectives, specific objectives and research question(s)
- Review of literature
- Summarizes expected outcomes, including the anticipated impact(s)
- Provides clear succinct rationale for why the project should be funded

Objectives

Your IR Introduction provides critical information for funding and community support by accomplishing the following three objectives:

1. Provide a foundation for the further development of the proposal (overview of the problem)
2. Facilitate background information on and reports from similar studies (systematic analysis and succinct review of literature)
3. Systematically state why the proposed IR should be undertaken (rationale), what you hoped to achieve (objectives) and expected results (outcomes)

Guidelines for writing your IR introduction

- Getting started can be the most difficult part of writing an IR introduction.
- Begin by conducting a systematic analysis about the problem and why it is important for this research be done.
- Once you have initial ideas written you will continually edit the introduction as you progress, discuss issues with your team and receive feedback from the large workshop group and facilitator.

What to write about

- An overview of the health situation and context
- A description of the nature of the problem
- An analysis of the different factors that may influence the problem
- A description of solutions tried (background), and justification for further research
- Information expected to result from the IR research and how this information will be used to solve the problem (outcomes)

Developing the title

Four components of a good title:

- Use "action" words
- Reflect implementation and intervention themes
- Include specific target populations (adolescence, children under 5, etc.)
- Include specific geographic location

Rationale

- The IR Introduction must justify why the research problem identified is important and worthy of funding
- To provide this justification begin by providing evidence through a systematic analysis of existing information

Statement of the problem

- Summarises the purpose of the study
- Is a paragraph rather than a single statement
- Establishes the direction and captures the essence of the study
- Is clear and concise
- Incorporates the general objectives and uses action words to succinctly outline the purpose of the study
- Reflects the research design of the study
- Leads to the research question(s)

Is the problem is worthy of research?

To get an indication if the problem is an appropriate research project, ask the following questions:

- Is there a perceived difference or discrepancy between the situation that exists and the ideal or planned situation?
- Is there a clear reason for the difference or discrepancy to the problem?
- Is there more than one possible answer or solution to the problem?

Narrowing the research problem

1. Clarify the viewpoints of all stakeholders
2. Specify and describe the core problem
3. Identify the factors that may have contributed to the problem and clarify the relationship of the problem

Research objectives

Research objectives should be SMART:

- Specific
- Measurable
- Achievable
- Realistic
- Timely

In addition, you need to consider if the research is:

- Relevant
- New or innovative
- Urgent
- Feasible in the political context
- Ethical

Overall objectives

- Specific versus overall objectives
- Outline the purpose for conducting the research
- Clearly state what the study is expected to achieve in general terms
- Align with the broader social, economic and health concerns outlined in the overview of the Introduction, and further focus the context of the research down to an essential purpose

Specific objectives

- Specific objectives are a breakdown of general objective(s) into measurable action statements that outline what will be done, where and for what purpose
- Use action verbs when defining specific objectives

Research question(s)

Should be

- of interest to the research community, researchers, policy-makers; decision-makers, funding agencies, and health care providers
- answerable and provide important information
- shaped by the problem and in turn shape the research design
- clear and specific
- feasible

IR research question(s)

- Address the needs of health care providers, programme managers and policy-makers, not only academics
- Describes the health situation and intervention (include those in place and potential interventions)
- Provides information required to evaluate ongoing interventions or progress needed for making adjustments in the intervention
- Analyses possible causes for missed targets in order to find solutions

Formulating IR questions

When formulating an IR question, you should consider the following:

- How could it best be answered?
- How could it feasibly be answered?
- What data is available? What data is needed?
- What do you have control over?

Prioritizing IR questions

In prioritizing research questions, pay attention to:

- Relevance
- Avoidance of duplication
- Urgency of need
- Political context
- Feasibility
- Applicability of results or recommendations
- Ethical acceptability

Review of the literature (synthesis of existing knowledge)

- Involves library searches to find relevant and up-to-date resources, reading and synthesize the existing information and literature into a succinct overview
- Demonstrates relevance by establishing what is already known about the research problem and how it has been approached in the past
- Provides a rationale for why it is crucial to conduct the research
- Indicates what is not known about the topic
- Helps you refine the statement of the problem
- Provides the 'state of knowledge' on the topic and sets up the research question(s) being investigated
- Establishes credibility

Completing review of literature

- Reading and writing can be an iterative process
- Requires dedicated time and attention
- Unlikely you are going to complete your synthesis of existing knowledge during the current training
- Our goals are to:
 1. ensure you understand what is involved
 2. ensure you are aware of tools available to assist you with this task
 3. provide you with examples of a brief review of literature from IR proposals
- You can continue to develop your review of literature after the workshop

Characteristics of literature review

- Presents an argument based on existing information (published literature; reports, government documents etc.)
- Synthesizes information from many sources
- Well written with one paragraph logically flowing into the next
- Critiques research studies for methodological shortcomings (when and if appropriate)
- Synthesis should support your research question
- Search engines such as PubMed and Google Scholar will be helpful

Referencing

- The ideas included in the Review of literature should be properly cited
- Software programs available to help manage, store and use references effectively
- Improper referencing can hamper the chances of success in your grant application
- Not referencing or improper referencing can result in plagiarism
- All and only references cited in the text should be included in the reference list



Create your Statement of the problem

- During the evening, work in your teams to develop the following for your team's project:
 - a working title
 - a Statement of the problem for your IR proposal (1/2 page)
 - your Research question(s)
 - Specific objectives for your project (4 to 6 objectives)
- Be prepared to present your drafts on day 2

