

Guideline for developing your research proposal





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Presentation of RESPACC Project

Research for all palliative care clinicians Erasmus+ 2020-1-RO01-KA202-080128

The **RESPACC** (Research for all palliative care clinicians) project aims to introduce basic research competences as part of the clinical practice of palliative care professionals. In order to achieve this aim, the following objectives have been identified:

- 1: Designing effective education strategies for enhancing basic research competences across members of multidisciplinary teams in palliative care.
2. Stimulating the development and use of innovative approaches to increase the effective uptake of evidence-based research in palliative care.
3. Increase the research capacity for practitioners in palliative care.
4. Raise awareness of the importance research integration in clinical practice amongst palliative care PC clinicians.

Complex activities are included in the project, such as: developing a core research competencies framework, a guideline related to critical reading and academic writing associated with four webinars on specific topics, a flow diagram for a research proposal with videos on specific topics and guidance material related to methodology, design, data collection and analysis of qualitative and quantitative research. Materials are available in English, Romanian, Greek and Spanish.

Project lead: HOSPICE Casa Sperantei Foundation

Partners: Transilvania University, Brasov,
European Association of Palliative Care, Belgium,
University of Navarra, Spain,
Galilee Palliative Care Unit, Greece.



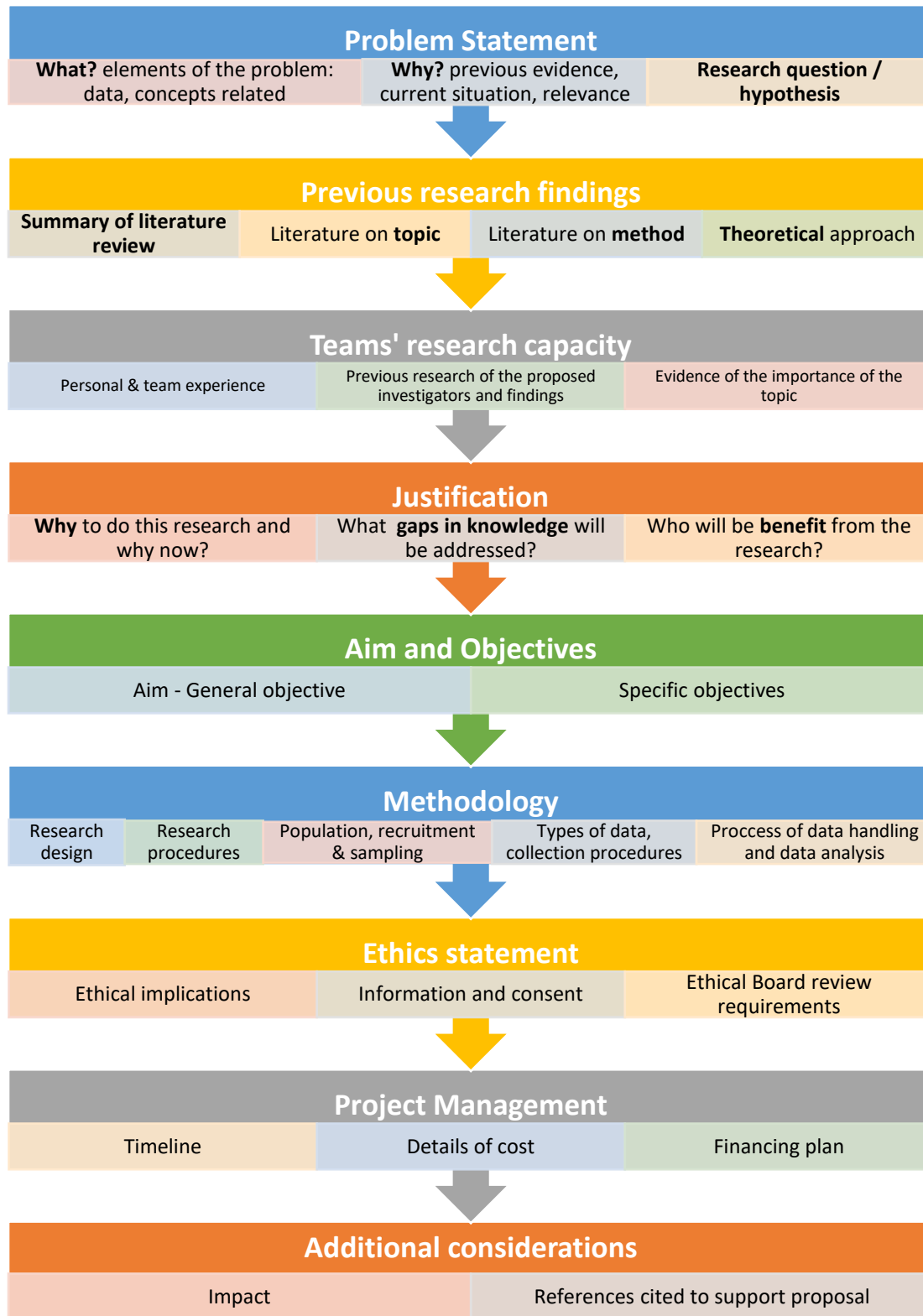
Introduction

Integrating research as a core competency in palliative care is important, as it fosters better understanding of new development in the field, reducing the gap between researcher and palliative care practice. The findings in research projects have the opportunity to be replicated in other clinical specialties.

In this guideline, you can find a brief description of the steps in developing a research proposal, according to the flow-chart proposed by the RESPACC team.

In next page, the flow-chart is showed. After, each chapter includes definition of terms, examples, practical advice, links to other materials developed by RESPACC team or other support materials and references.

Research Proposal Flowchart



Problem Statement - (in a Clinical Context)

Introduction

This is the first step of the flowchart that aims to offer guidance to palliative care clinicians to translate their everyday clinical problems into a research question.

A statement is used in research to outline the problem addressed in a study. It briefly describes a gap between the ideal level of practice and the current state, while introducing an investigation to understand and address it. A problem can be described as a multifaceted issue which is initiated by a practical or theoretical concern, that could be addressed by the team, clarified, prioritized and transformed into an appropriate research question.

Once the nature of the clinical problem is understood and the research question is formulated, a subsequent literature search will reveal if there are evidence-based practice solutions available, or not. If they exist, an audit can address the issue, to bridge the practice gap. If an appropriate answer cannot be found, a research project or clinical study could be initiated, to address the research question.

Definition of Terms

What is a Problem Statement in research?

It is a statement about a troubling question, an area of concern, a difficulty to be eliminated, or a condition to be improved in practice that points to the need for meaningful understanding and deliberate investigation. It offers a thorough understanding of a clinical problem and is the foundation for the formulation of a research question.

What is a research question?

It is a question that a research project sets out to answer. It is a statement that identifies the phenomenon to be studied. A good research question defines the investigation, sets boundaries, and provides direction for data collection and analysis. Developing a researchable question can be challenging if you do not know what you really want to do.

HOW TO...formulate your problem statement...

To formulate a problem statement, it is important to answer the following questions:

1. What is the problem?

What is the gap in knowledge, the difficulty, the specific issue, etc. which will be addressed? What is already known? Is there specific, evidence-based knowledge on the issue? Is there evidence for the problem's existence? Define what is the current practice and how it falls short of the ideal level? It is important to discuss and specify as a team what led to seeking new evidence for a specific issue and to agree on the scope of the problem, examine available resources, ethical issues and expertise. Ensure, at this point, that you describe the problem and not the solution to it.

2. Why is it important?

Why does the problem matter, why is it important? Why is it relevant to practice and why does it need to be solved? What may be the consequences if it is not addressed? Why is it timely to address the research question now?

3. How will the problem be addressed?

How does the team propose to improve the current practice and move it towards the ideal? How will it help to design the investigation to understand the problem and devise ways to address it? How will research contribute to the existing knowledge?

4. **What are the PICO components of the problem? (in quantitative research)**

- a. **P** (patient, population, problem) e.g., age, sex, culture, disorder, disease, location, type of patient, population
- b. **I** (intervention) e.g., treatment, medicine (drug), education activity, best practice, diagnostic test
- c. **C** (comparison with other interventions or current practice)
- d. **O** (outcomes) should be measurable; do we achieve the desired change and how this can be measured in terms of: e.g. increase in patient satisfaction, decrease in length of stay

PICO + T

P	I	C	O	T
Patient / Population	Intervention / Indicator	Compare / Control	Outcome	Time / Type of Study or Question
Who are the patients? Age, sex, geographic location, or specific characteristics that would be important to your question.	What is the strategy, diagnostic test, or exposure that you are interested in?	Is there a control or alternative strategy you would like to compare to the intervention or indicator?	What are the patient-relevant consequences of the intervention?	<i>What time periods should be considered? What study types are expected to have the information you are looking for?</i>

Examples:

In order to clarify your question, it may help to classify it. Some examples are:

Intervention - Question on the efficacy of a treatment of an illness or disability

e.g. In patients suffering from cancer receiving palliative care (**Population**), how effective is haloperidol (**Intervention**) compared to risperidone (**Comparison**) in controlling delirium (**Outcome**) during the last days of life (**Time**)?

Aetiology - Question on causes/origin of the disease, the factors producing or predisposing to a disease/disorder

e.g. are cancer patients (**P**) with metastatic bone disease (**I**), compared to cancer patients without bone metastases (**C**), at increased risk of spinal cord compression (**O**) during first line chemotherapy (**T**)?

Quality of Life/ Meaning - Question on how somebody personally experiences a phenomenon

e.g. how do patients suffering from Amyotrophic Lateral Sclerosis (**P**) who underwent tracheostomy (**I**), perceive training on eye tracker (**O**) one month after the operation (**T**)?

HOW TO...refine your problem statement...

A problem statement can be refined and adjusted as the team searches through the literature. The initial broad topic may become a more focused question or somehow changed based on the evidence provided by the review.

What are the characteristics of a good research question?

Once you decide you have a good question, in order to make it more robust and shed further light on potentially grey areas you could further investigate the “FINER” framework and how it applies for your research question (Feasible, Interesting, Novel, Ethical, and Relevant).

F – Feasible: Means that the question is within the research team’s ability to investigate. The team should address realistically the scale of research, their capacity in data collection and research completion, continuously considering the research team’s skills and all the resources available (time, resources, expertise, funding).

I – Interesting: The ideal research question should interest the research team, co-investigators and also the broader scientific community.

N – Novel: The research question should bring new insights on the topic of research, should provide an answer to the gap of knowledge, extend or further confirm previous findings.

E – Ethical: One of the most important considerations in research. Appropriate review boards must approve the research question and the subsequent study, especially if it involves human beings.

R – Relevant: The research question should be relevant to the scientific community and people involved in this area of study, apart from being novel and interesting.

Practical Advice-Message from the experts. Dos and Don'ts

The Do's:

- Keep your ideas clear and precise. The aim is to introduce novel research findings not to tell the story of your work.
- Ensure that the readers can form a thorough understanding of the topic in all its aspects.
- Present trustworthy and the most up-to-date information by engaging into a very thorough literature research.

The Don'ts:

- Avoid including anything that does not answer or solve the question you originally had.
- Avoid unnecessary details. Keep it relevant and to the point.
- Avoid incomplete and unreasonable arguments for pursuing this research.
- Avoid forgetting to reference any supporting material or related research by other researchers.

Links to RESPACC resources

[RESPACC O3 Problem Statement - YouTube](#)

References:

1. Centre for Evidence-Based Medicine (CEBM). Asking focused questions [Internet]. University of Oxford, Oxford UK; [cited 2021 Jul 1]. Available from: <https://www.cebm.ox.ac.uk/resources/ebm-tools/asking-focused-questions> accessed 1st June 2022
2. EBSCOHealth, "7 Steps to The Perfect Pico Search" https://www.ebsco.com/sites/g/files/nabnos191/files/acquiadam-assets/7-Steps-to-the-Perfect-PICO-Search-White-Paper.pdf?_ga=2.207789076.763107806.1597343248-2094525131.1596825220 accessed 1st June 2022
3. FINER: a Research Framework <https://scientific-publishing.webshop.elsevier.com/research-process/finer-research-framework/> accessed 1st June 2022

Other support materials for further reading

4. How to Write a Research Question: Types, Steps, and Examples: <https://research.com/research/how-to-write-a-research-question> accessed 1st June 2022
5. Medical Research Library of Brooklyn: Johns Hopkins Nursing Evidence-Based Practice Question Development Tool, Evidence-Based Practice Stakeholder Analysis Tool, PICO: Framing a Clinical Question <https://guides.downstate.edu/c.php?g=868154&p=6230292> accessed 1st June 2022

Previous research findings

Introduction

This section will demonstrate your knowledge of the research problem and your understanding of the theoretical and research issues that are relevant to the research question. It should persuade the reader that the proposal will make a substantial contribution to the literature, solving a problem or filling an important gap. It is important to give credit to those who have worked on the topic before by laying the groundwork for what your research will be. Sometimes the literature review is included in the introduction section but other times it is presented separately, for more clarity in the proposal.

Concepts

Summary of the literature review: You must critically evaluate the relevant bibliographic information. That is, the information is presented analytically and with a subjective assessment by the researcher. It is presented as a summary, i.e., showing your ability to integrate and synthesize the existing literature.

Literature on topic: Relevant research papers are accessed from appropriate databases and electronic journals. These are analysed and the findings summarised and discussed in relation to the aim of the proposed research study.

Literature on method: You should review the research methodology used in previous studies, commenting on relative strengths and weaknesses, giving appropriate context to the methodology of your proposal, or justifying why another framework will be used.

Theoretical approach: Following the review, you may identify new theoretical insights or a new conceptual framework for your research.

How to ... with examples

a. Start exploring the state of the art by searching the internet

Exploratory search can help you to identify interesting angles. Surfing the internet and browsing through journal articles are good ways to start. Find out what people are saying about your topic on blogs and online discussion groups. Discussing your topic with others can also inspire you. Talk about your ideas with your classmates, your friends, or your instructor. All these are ways to focus a topic and understand the previous research.

b. Considers the sources of scientific evidence in an orderly way.

Start your review by first looking in textbooks and manuals. Then search relevant research articles in appropriate databases. First, identify recent clinical guidelines and systematic reviews, and perhaps one or two recent editorials as well. After studying all these in detail, focus more on the landmark studies (which you will probably have already identified). Give priority to controlled and prospective studies and not to anecdotal or retrospective work.

c. Update your findings conducting a short systematic search

Science is advancing rapidly and, even if you don't know it yet, it is likely that others are working on ideas very similar to yours. You should systematically search for the latest advances in the area you are particularly interested in. You should carry out a very specific, systematic search of the last few years that is very focused on your topic.

d. Synthesize the previous findings in a few paragraphs.

Briefly summarize what you have found. Present it analytically and critically. You will explain the relevance of the findings, and, in some cases, you will challenge them. If you need inspiration, don't hesitate to look closely at the introduction of two or three of the most important previous articles you have identified. They are usually a good example of what you want to achieve and will serve to put your innovative vision of the problem in context and with clarity.

Example

Research proposal: A Prospective Study of Methylnaltrexone for Opioid-Induced Constipation in Advanced Illness: Should We Use It or Not?

In May 2008, Thomas et al (1) published a pivotal clinical trial that demonstrated the effectiveness of methylnaltrexone (MTNX) in patients with opioid-induced constipation (OIC). This study showed a laxative response of 48% within the first four hours in the drug treated group vs. 15% in the placebo group ($P < 0.001$). No changes in the perception of pain were found during treatment; reported adverse events were mild and mainly limited to abdominal pain and flatulence. A few months later, the U.S. Food and Drug Administration (FDA) approved the use of subcutaneous MTNX for OIC in cancer patients who do not have an adequate response to conventional laxative treatment. In other early clinical trials, (1-6) side effects also were scarce and mainly related to abdominal discomfort. A post hoc analysis of two clinical trials ($N=165$) showed that 28.5% of patients experienced abdominal pain. (3) Encouraged by the results of these studies, we designed a prospective, observational study in November 2010 to assess the clinical benefit of MTNX in clinical practice.

Reference: Centeno C, et al. Journal of Pain and Symptom Management. 2013

Practical advice

- It is essential to structure this section intelligently so that the reader can grasp what is different, innovative or original in your proposal
- Maintain focus, unity and coherence throughout the text.
- It is preferable to summarize each article in one sentence or paragraph, highlighting details pertinent to the topic of interest.
- The review can be developed from the most general to the most specific studies.
- A historical progression can also be used to develop the argument, but without the necessity to do so exhaustively.
- The bibliography should include supporting data, disagreements and controversies.
- Cite influential articles and recent developments pertaining to your topic and avoid citing irrelevant or trivial references

- At this stage of the research, it is common to use secondary sources, but do not rely too heavily on them.

Other Support materials

1. Web of University of Southern California (USC) Libraries: Organizing Your Social Sciences Research Paper. The literature reviews. Offers detailed guidance on how to develop, organize, and write a college-level research paper in the social and behavioral sciences. See the section on literature review <https://libguides.usc.edu/writingguide/literaturereview> . [Last accessed on 2021 Aug 25].
2. Web of Queen University Belfast. The literature review (Writing a research proposal). <https://www.qub.ac.uk/Study/PostgraduateStudy/Postgraduate-research/pgr-steps-to-apply/writing-a-research-proposal/#literature-review-943309-3> [Last accessed on 2021 Aug 25]
3. Fink, Arlene. *Conducting Research Literature Reviews: From the Internet to Paper*. Fourth edition. Thousand Oaks, CA: SAGE, 2014.
4. Aveyard, H., Payne, S., & Preston, N. (2021). A Postgraduate's Guide to Doing a Literature Review in Health and Social Care, 2e.
5. Hollins Martin, C.J., Fleming, V. (2010). A 15-step model for writing a research proposal. *British Journal of Midwifery*. 18(12): 791-798.

Research capacity in clinical teams

Introduction

The purpose of this section is to detail the step called “the research capacity of clinical teams” in the research framework.

Definitions of terms

Building the research capacity and capability of palliative care clinicians (nurses, physicians, physiotherapists, social workers, psychologists, occupational therapists, dieticians, pharmacists, spiritual counsellors, etc.) is recognized as a priority due to the benefits this brings for individuals, their countries and their economies. Research capacity building of professionals in specialist palliative care services should be a continuous process of developing sustainable expertise and skills enabling individuals and organizations to perform high quality research. The goal of research capacity building is to complement health professionals’ existing clinical expertise with research skills. Some of the reasons why palliative care services should encourage professionals to engage in research are: the positive perceptions of research among those professionals that can influence others, be better at applying research evidence to inform their practice, and enjoy greater job satisfaction.

Research provides a means for palliative care clinicians to evaluate the quality and efficiency of their services, contribute to a wider evidence-base to inform service planning and delivery, advance their profession’s knowledge and influence funding bodies. Although palliative care professionals indicate that they are interested in conducting research, the research culture and engagement remains limited due to a number of barriers, including lack of time, other work roles taking priority and lack of research skills.



How to ... with examples

The most common motivators for doing research are to address identified problems in practice, provide the best possible care for patients, build the evidence base to inform service delivery, improve job satisfaction and enhance career opportunities. In efforts to address these barriers and motivators, there has been research that revealed the commonly recommended strategies for changing the status quo. To promote change, most recommendations are to have: protected time, to allocate funds, to have support from managers, to benefit from continuous mentoring, to establish partnerships with academic institutions and to have dedicated research facilitators.

Practical advice

Internationally, there have been different strategies recognized that come with concrete recommendations for facilitating research, based on the evaluation of needs, interests and experiences of palliative care clinicians in relation to research. Slade et al (2018) conducted a study that produced several recommendations designed to inform a future policy framework for embedding research into routine clinical practice across public and private healthcare systems, rather than having a practical focus for clinicians and managers.

In a systematic review conducted by Matus et al (2018), the authors synthesized existing research capacity building frameworks relevant for health care professionals. Three interconnected and interdependent themes were commonly found from the frameworks including:

- "supporting clinicians in research",
- "working together" and
- "valuing research for excellence"

To conclude, the organizational environment should encourage and support development of research capacity for active clinical professionals.



References:

1. McKeon S., Alexander E., Brodaty H., Ferris B., Frazer I., Little M., *Strategic review of health and medical research in Australia. Canberra: Commonwealth of Australia; 2013; 1-304.*
2. Holden L., Pager S., Golenko X., Ware R.S., *Validation of research capacity and culture tool: measuring RCC at individual, team and organization levels., Aust J Primary Health, 2012; 18(1): 62-67.*
3. Hulcombe J., Sturgess J., Souvlis T., Fitzgerald C., *An approach to building research capacity for health practitioners in a public health environment: an organizational perspective. Aust Health Rev 2014; 38(3): 252-8.*
4. Skinner E.H., Williams C.M., Haines T.P., *Embedding research culture and productivity in hospital physiotherapy departments: challenges and opportunities. Aust Health Rev 2015; 39(3): 312-4.*
5. Cooke J., *A framework to evaluate research capacity building in health care. BMC Fam Pract 2005; 6(44): 1-11.*
6. Cooke J., Nancarrow S., Dyas J., Williams M., *An evaluation of the "designed research team" approach to building research capacity in primary care. BMC Fam Pract, 2008; 9:37.*
7. Whitworth A., Haining S., Stringer H., *Enhancing research capacity across healthcare and higher education sectors: development and evaluation of an integrated model. BMC Health Serv Res 2012; 12(1): 287.*
8. Slade S.C., Philip K., Morris M.E., *Frameworks for embedding a research culture in health practice: a rapid review. Health Res Policy Syst 2018; 16(1): 29.*
9. Matus J., Walker A., Mickan S., *Research capacity building frameworks for allied health professionals: a systematic review. BMC Health Serv Res, 2018; 18(1): 716.*

Justification of research

Introduction

In this section, the researcher needs to justify the importance of the research to be conducted in the proposal.

This section covers the following issues:

- Relevance and importance of the study: *Why do this research? Why now?*
- Practical application of the study output: *What gaps in knowledge will be addresses?*
- How the new knowledge gained through the study will contribute to the solution of practical problems: *Who will be benefit from the research?*
- How the study findings will be useful in policy formulation.

Definitions of terms

But what does that actually mean?

In the following paragraphs, we will explain what you should include in your research justification and why it is important.

The **research justification** basically addresses the following questions:

- Why your research is necessary and what it will do?
- What benefits will the research have?
- What new opportunities could open up because of the research?
- What problems will be solved by your research?
- How will these problems, once solved, affect your palliative care community (patients, families, professionals, etc.) at this time?

Here you can show that you understand the situation and the current needs of your beneficiaries. You can show that you are able to develop a plan that addresses their needs. If you can explain that there is a good reason to carry out your research and that there is an imminent need that it will address, your proposal/paper has a much better chance of being considered. Research justification is about trying to explain

why we need to implement a particular solution to the problem we have described in the research proposal (e.g. clinical trials) or why do we need to develop insight into a particular clinical issue (e.g. exploratory research). It tells the reviewers why this is the best solution to address the problem (in trials) or what is the reality of a clinical process, what to keep in and what to take out of it, how can we enhance a certain process of care.

How to Write a Research Justification

The best way to write this is to introduce the current literature in the background/Introduction section and then highlight the gaps in the literature that have not been addressed or are yet to be understood. This will help set up the need for the current study and thus justify the need for this research. You should write the research justification carefully in order to be able to support your arguments with evidence and data, including here: to define key terms, to provide epidemiological or related evidence, the status of service provision description - where relevant. Some of this can be generic and you can find this data online, some may be very specific to your research and be collected by the palliative care community (patients, families, professionals, etc.) that you are referring to at the moment. You need to support this through statistics – make sure the data you present is reliable and not too generic. For example, if the focus of your investigations is “to develop insights into the response of palliative care services caring for people from ethnic minority groups during Covid-19”, you will need to explain:

1. Palliative care services
2. People from ethnic minority groups
3. Covid-19

Other support materials

The example given in the video describing the justification step in the research framework might be of help.

[RESPACC O3 Justification - YouTube](#)

As the justification is normally one of the first paragraphs of your research, make sure it is well written and easily understandable. If you make spelling mistakes here or use too long sentences, you might discourage people from reading on.

The research justification is similar to the research rationale or the background of the problem or issue that you are referring to.

References:

1. Al-Riyami A., How to prepare a Research Proposal, Oman Medical Journal 2008; 23(2)
2. Karanja J., A guide to research proposal and thesis writing, KIM School of Management, 2011
3. Mitrea N. et al, Evaluation of the Optimal Positioning of Subcutaneous Butterfly when Administering Injectable Opioids in Cancer Patients, Clujul Medical, 2016

Aims and Objectives

Introduction

Formulating clear research aims and objectives is an important aspect of your research proposal. Aims and objectives are the foundation on which the project is constructed and they determine the scope and the direction of the research. Usually, you will have one research aim with several research objectives. You need to take time to formulate the aim and objectives and discuss them in your team. They are important not just to convince funders that you have a worthwhile, clearly articulated research idea that deserves to receive resources, but also for you to assess the results of your research. If your objectives are not fully achieved by the end of the study, you will need to discuss the reasons why not (maybe initial inappropriate formulation of research aims and objectives, other variables that were not considered at the beginning of the research, etc).

Definitions of terms

AIMS "...WHAT you want to know..."

The research proposal's aim to describes the main goal or the overarching purpose of your research project. It is a statement that broadly points out what are your aspirations in reference to the research, and what you hope to accomplish through your research. An aim is therefore generally broad, ambitious, but achievable. It can range in length from a single sentence to a short paragraph.

Objectives "...HOW...the specific steps you will take to achieve your aim..."

Objectives are a specific set of research actions that you plan to carry out in your research project. They can be seen as steps that address HOW your research aim will be achieved. They are focused, practical, timebound, linked with a concrete research method. Research objectives divide research into several parts and address each part separately. Usually, they are presented as a numbered list.



How to ... with examples

a. Write your research aims

The aim/aims should briefly describe why your research is needed (i.e. the context), what it sets out to accomplish (the actual aim) and, briefly, how it intends to accomplish it (overview of your objectives).

When writing the aim, it is good to write one/multiple sentences that will be the answer for each of the questions below:

1. **Why** is this research required? (this is your context)
2. **What** is this research about? (this is the real aim of your research)
3. **How** are you going to do it? (this is an overview and introduction to your objectives)

Aims are usually written using an infinitive verb "**to + action**". (*to map, to design, to track, to generate, to build, to catalogue, to challenge, to critically interrogate* - see also list of action verbs at the end of chapter)

Example

The aim of our research is to design a model for delivering specialized palliative care services in rural areas in Romania.

b. Write your research objectives

When you write your research objectives use the SMART format

S= Specific: Write them clearly and keep them narrow and focused.

M= Measurable: You must be able to measure them in order to know how you progress towards achieving them.

A= Achievable: You must create objectives that you can realistically achieve with the financial and human resources that you have available.

R= Relevant: The objectives must be relevant to achieving your overall research aim.

T= Time-bound: Build milestones/timelines for each objective.

Examples for potential objectives for the aim written above:

1. *Explore palliative care needs of patients with life limiting illnesses in rural communities by organizing focus groups with patients, family members and community health care workers in 5 pilot countries in Romania in the first year of the project*
2. *Identify type and number of palliative care intervention provided on a monthly base in rural communities in the 5 pilot counties through an online survey of GPs from the rural area of the 5 pilot counties in the first year of the project*
3. *Design key palliative care interventions to be delivered as part of the specialized palliative care model in rural communities through a consensus conference organized in the second year of the project followed by a Delphi study in the 3rd year of the project*

Practical advice

- Keep your number of objectives limited to five or less for a research aim
- Number separately each research objective. Do not collate all the objectives into one paragraph!
- Write your research objectives in a concise clear sentence using just the essential words.
- Use action words to formulate your research objectives (see examples in the link provided below, at Other Support materials)
- Make your research objectives realistic that means achievable in the time frame of your research project and with the resources you have available
- Ask feedback from colleagues after reviewing them

Links to RESPACC resources

[RESPACC O3 Aim and objectives - YouTube](#)

What is research http://www.studiipaliative.ro/wp-content/uploads/2022/09/1.RESPACC-O4_What-is-research.pdf



Other Support materials

Examples of Research Verbs to Use in Aims and Objectives

<https://www.discoverphds.com/advice/doing/research-aims-and-objectives>

References

1. <https://www.discoverphds.com/advice/doing/research-aims-and-objectives>

accessed on 18th March 2022

Methodology

Introduction

Choosing the most appropriate methodology to answer the research question is a key step to developing a high quality and rigorous research project. Methodology refers to the science that underpins the methods. This includes the logic and assumptions that underpin your chosen methods. The term 'Methods' describes how you are going to carry out the study. It can be challenging for beginners to choose the most appropriate methodology. You need to take time to reflect on it and discuss with more experienced researchers about possible methodological options. The overall methodological choice will lead you to consider more specific approaches (ie: quantitative, qualitative, mixed method). It will lead to also making decisions about designs and later about data collection and analysis.

Methods have to be congruent with methodology. It is as if you were at crossroads of paths. First you select a methodological approach and then you have to move forward and one step leads to the next one. The decision-making process helps also to identify practical aspects that you need to consider to carry out of the project successfully.

Definitions of terms

METHODOLOGY "...WHAT is the underpinning assumption..."

Methodology refers to the science and theoretical positions underpinning the research. It refers to the school of thought by which you conduct research. It will inform the methods that you use to answer a particular research question. It guides which types of data collection and analysis methods you will use.

If we think of an iceberg as an analogy, methodology is the part that is under the water. It is not immediately visible, but it holds the tip of the iceberg.



METHODS “...HOW...the specific steps you will take to conduct the study...”

Methods are about the practicalities of conducting and analysing research. It describes how you collect and analyse your data. It needs to contain enough information to allow readers and researchers to be able to reproduce your research and results. For example, how you are going to collect the data (e.g.: observation, questionnaire, interviews...); how you are going to sample participants, how you are going to analyse the data.

Considering the iceberg analogy, methods is the tip of the iceberg, the part that is visible. It should read almost like a step-by-step guide. It refers to all those methods or techniques that are used for conducting research. It needs to specify the research design; the population, recruitment and sampling; data collection process and data analysis. Here it is a brief definition of key aspects:

- **Research design** refers to the blueprint for the collection, measurement and analysis of data....
- **Population** refers to the entire group that you want to ‘draw conclusions or represent’. It does not always refer to people. It could be institutions, palliative care services...
- **Sampling** is the process of selecting the sample that will take part in the study. In general, it can be a random selection (everybody has the opportunity to participated) or not random where participants are selected because of specific characteristics, or a purposive, or convenience sample.
- **Sample** is the specific group that you will collect data from.
- **Recruitment** refers how you are going to inform and actively seek out potential participants.
- **Data collection** includes how you are going to collect the data. You need to be specific about what data are collected, what exactly are you recording, how and when. If you are planning to use measurement scales, you need to specify them or if you are doing interviews you need to describe the general areas that you expect to cover during them.

- **Data handling** involves how you are going to deal with the data, who is going to have access to data, where data are going to be stored, and how data are protected (ie. Passcode protection), processed to anonymise it or keep it confidential. If it's a qualitative study the analysis usually entails a prior transcription of the audio recording of interview or focus group data before analysis of the text. If the study is quantitative where data are transformed into numbers, you may need to save the data on a data handling platform or check that is adequately recorded to avoid errors. Data handling is important for later analysis.
- **Data analysis** refers to making sense of the data. In quantitative studies, descriptive and inferential statistical analyses of numerical data are used to explore relationships among variables (specific aspects are measured). In qualitative studies, analysis uses textual data to infer meanings. It may involve creating codes and themes that capture the meaning of the data. In any type of research, the complexity and depth of the data analysis has to be coherent with the study objective. You need to report what type of analysis you are conducting.

How to ... with examples

a. Reflect on methodology

It is useful to share your ideas with others, discuss how they understand the same aspects that you are interested in. It will help you to identify your underlying assumptions, some of which you may not even be aware of. As mentioned in the iceberg analogy, it's something hidden that it's perceived depending upon the wording used and how the question is framed. It transmits different ways of looking at the world. You need to find the one that suits your research question.

For example, imagine that you are thinking about doing research into an event:

- Do you think that the event is understood in the same way by all participants? It has a concrete existence in the external world. If you assume that it is true, you can ask: What did really happened in that session?
- Do you think that it may be understood in different ways by the people who were there? Then you can ask: What do people think happened?

- If your interest is in what people say (the language and expressions that are used) that happened? If it is the case, you can ask: How do people talk about what happened? and why do they say that?

These examples show different ways of looking at the same event. It is implicit in the way you write and unless you reflect and discuss with a more experienced researcher it can go unnoticed.

b. Write your methods

There are some main sections that are common to writing a methods section. When writing it consider this structure. Here you have an example of a quantitative and of a qualitative study within each section.

- Design

Example:

- a) A quasi-experimental design can be conducted (to examine if early integration of palliative care provided added benefit compared with usual care on patient's anxiety and depression levels)
- b) A phenomenological study can be carried out (to explore how patients with advanced cancer experience daily life)

- Population, recruitment & sampling

Example:

- a) Potential participants will be approached and informed about the study by the oncology team. Eligible patients will be 18 years or older, and will have advanced cancer due to a solid tumour, with an estimated life expectancy of 12 months. These patients will be consecutively assigned to either early integration of palliative care in oncological care or to usual oncological care. It is estimated that a sample size of 120 participants is needed to detect statistical differences.
- b) Patients attending the Cancer Institute of XX will be informed about the study by the oncology team. Participants will be recruited using purposive



sampling. Selection criteria for patients included are: (1) stage 3 or 4 cancer, (2) living in different areas, rural and cities, (3) with different family support situations. It is estimated that about 15 patients will be sufficient to reach the study objective, but data collection will continue until the essence of the experience is explained.

- **Data collection and procedures**

Example:

- a) A researcher with no clinical relationship with the patient will assess the levels of anxiety and depression on both groups (the early intervention of palliative care and the usual care). The Hospital Anxiety and Depression Scale (HADS) will be used. These data together with other variables such as: age, gender... will be collected at the third week of hospitalisation.
- b) The researcher will conduct a face-to-face unstructured interview at a time and place agreed with the participant. The interview will start with an open-ended question: I would like to understand how is your life with this disease (used his/her wording to refer to the cancer). How has living with this disease affected you? What is your daily life like with the disease? The interview will unfold following the patient narrative and by exploring key moments of the disease trajectory and what aspects help. The interviews will be audio recorded.

- **Data handling & analysis**

Example:

- a) All the data will be entered in a database and will be anonymised using an identification number. Statistical software will be used (ie: STATA, SPSS) for data analysis. Appropriate statistical tests will be used to compare the two groups to evaluate differences on depression and anxiety levels between the groups.
- b) Recorded data will be transcribed verbatim. This will be analysed using phenomenological approach following van Manen method. Two researchers will inductively analyse the data. Quotations will be used to illustrate the

study findings. No identifiable information will be provided to promote confidentiality.

This is an overview to structure your methods section. You need to take into account that there are also peculiarities and details specific to each research design that will require further reading and specificity when writing your protocol. Using a reporting checklist for specific designs can be a helpful source to specify the project structure beyond the commonalities of any research. For example:

- CONSolidated Standards of Reporting Trials (CONSORT)
- The Joanna Briggs Institute Critical Appraisal tools- Checklist for Quasi-Experimental Studies
- COnsolidated criteria for REporting Qualitative research (COREQ)
- Critical Appraisal Skills Programme (CASP) checklist

Practical advice

- Write the methodology so it is congruent with the aim
- Discuss with colleagues about methods and practical aspects
- Be explicit about how you are going to carry out the study

Links to RESPACC resources

[RESPACCC 03 Method - YouTube](#)

[RESPACC 04 What are, when and how to use quantitative methods](#)

[RESPACC 04 Quantitative research approaches](#)

[RESPACC 04 Making sense of data statistical analysis](#)

[RESPACC 04 When and how to use qualitative research](#)

[RESPACC 04 Methodology and data collection](#)

[RESPACC 04 Qualitative analysis-common aspects of making meaning of data](#)

[RESPACC 04 When and how to use mixed methods](#)

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Ethics Statement

Introduction

Ethical considerations in research are important and necessary aspects of a research proposal. They comprise a set of fundamental principles, such as beneficence, non-maleficence, justice, autonomy, and integrity, that guide research design and practice. Researchers must always adhere to a code of conduct that ensures the social and clinical value of the study, its scientific validity, independence, and impartiality, as well as participants' voluntary participation, protection and safety. These issues must be addressed and appropriately elaborated in the ethics statement of a research proposal. Sponsors as well as journal editors require that all research proposals or articles submitted for funding or publication respectively, adhere to these principles. Ethical guidelines and research related articles in professional codes of ethics are strictly enforced today, mainly because of past abuses, such as the Nazi experiments in prisoners of war, which led to the Nuremberg trials and eventually the Nuremberg Code in 1947.

Definitions of terms

WHAT are the key ethical considerations which should be addressed in the ethics statement?

1. Social and clinical value of the study: A research proposal should be important and valuable enough to promote useful knowledge for society and justify exposing human participants to the risk, harm, or burden of research.
2. Scientific validity: A study should be designed with a clear scientific objective and using accepted principles, methods, and reliable practices, to achieve an understandable answer to the valuable research question. Invalid research is unethical because it is a waste of resources and exposes people to risk for no purpose.
3. Participant's welfare: Although uncertainty is inherent in research, everything should be done to minimize the risks and inconvenience to research participants, to maximize the potential benefits, and to determine that the

potential benefits are proportionate to, or outweigh, the risks. Risks can be physical, psychological, economic or social.

4. Respect, protection and safety for potential and enrolled participants: Respect their privacy and keep their private information confidential. Respect their right to change their minds and withdraw from the study at any stage, without repercussions. Inform them of any new information emerging during the study that might affect their assessment of the risk/benefit ratio. Inform them about the results of the study.

WHAT in an Informed Consent?

It is the process by which potential participants, provided they have mental capacity, can decide the benefits and risks involved in taking part in a study. This is done through:

1. provision of accurate information, in simple concise language, of the purpose, methods, risks, benefits, and alternatives to the research
2. given enough time for comprehension of this information and how it relates to their own clinical or social situation and/or interests, as well as an opportunity to discuss it with their family and friends
3. voluntary decision about whether to participate without coercion or undue persuasion
4. provision of satisfactory answers to potential participants' questions and a reference name and contact information

WHAT is an Ethical Review Board?

An Ethical Review Board (Research Ethics Committee) is a committee that performs ethical review of proposed research. The committee consists of at least 5-7 experienced members (ideally including a lay person) of diverse expertise, independent from research sponsors, or other undue influence, who are appointed for a fixed term and operate under specific guidelines, regulations and operation procedures, in order to reach a consensus after discussion and decision-making process.

To WHOM should I apply to get an Ethical Review Board Approval?

Depending on which country or institution you plan to do your research (single country, multinational etc), the funding body and on the type of research (investigational drugs, patients, potentially vulnerable participants, caregivers, administrative issues etc.), the relevant Ethics Committee and the requirements for application and approval, vary significantly (<http://www.ethicsguidebook.ac.uk>, www.eurecnet.org)

WHAT are the different aspects that an Ethics Committee examines to provide approval?

- the protection of all participants and safeguarding of human rights
- the protection of dignity and wellbeing of persons
- benefits and risks ratio (physical, psychological, social, financial)
- scientific validity (aims of the study, sound methodology, feasibility of conduct etc.)
- the quality of research facilities
- qualification and suitability of investigators
- user involvement in research design
- data protection/safety issues
- participant information and informed consent
- recruitment issues/ fair selection of participants
- community considerations and social value of research
- name and contact information of the principal investigator

Guiding Principles for Ethical Research. Pursuing potential research participants protection. <https://www.nih.gov/health-information/nih-clinical-research-trials-you/guiding-principles-ethical-research>

How to ... with examples

Write an Ethics Statement

The ethics statement should describe fundamental ethical principles that guide research design and practice. When writing the ethics statement, it is good to

write multiple sentences that will attempt to answer each of the questions below:

4. **Why** your research is necessary and ethical (i.e., social and clinical value)?
5. **What** it sets out to accomplish and how the ethical aspects are ensured (i.e., scientific integrity)?
6. **How** are ethical principles on recruitment and enrollment of participants safeguarded (i.e., participants' welfare, eligibility criteria, informed consent)
7. **How** are privacy and private information respected (i.e., protection and data safety)
8. **How and by Whom** is ethical approval provided (i.e., Ethical Committee review)

Ethics statements are usually written using an infinitive verb "**to + action**". (*to respect, to consent, to protect, to ensure, to safeguard, to inform, to assess, to comprehend, to approve, to report, etc.*)

Example: <https://www.ukri.org/councils/esrc/guidance-for-applicants/research-ethics-guidance/ethics-statement-examples>

How to write an Informed Consent

When you write an informed consent you should include the following aspects:

1. Voluntary participation (initially or in the course of the study)
2. Purpose and background of the study (what is the research about, how this is relevant to the participant)
3. Procedures (what will happen to the participant e.g., interview, biomedical sample, personal data collection, medication etc., how long it will take etc.)
4. Risks, harms, or burden involved
5. Benefits of participation (potential direct personal benefits, or indirect to the community or society as a whole)
6. Confidentiality issues (data protection, codes, authorized access to data etc.)
7. Respect issues (information on interim or final study results)
8. Investigator's name as well as name and contact information of the person receiving complaints

9. Consent statement
10. Signatures (participant's and investigator's)

Example: https://sites.si.edu/permits/sd606/Smithsonian_Institution_Sample_Informed_Consent.doc

Last Accessed on 8th Sep 2022

Write an Application to an Ethics Review Board

In order to find out what are the requirements to write an application to an Ethics Review Board, as far as European- EU members are concerned, you should contact the respective EUREC member in your country.

<http://www.eurecnet.org/researchers>.

There are also guides with information on the human Research Ethics Review Boards application process, such as:

<https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1011&context=chsd>

Practical Advice on taking an Informed Consent

1. Assess mental status of participants with the appropriate screening assessment tools
2. Assess reading and writing literacy of participants
3. Use simple concise language
4. Give adequate time
5. Make sure they understand risks, burden, and benefits from participation
6. Make sure they understand the duration of the study
7. Be available to answer questions
8. If there is reading illiteracy, acquire verbal consent, properly witnessed, and signed

Practical Advice on writing an application to an Ethics Research Committee

1. Spend time preparing a thorough application because it will save you time in the long run
2. Include as much information as you can, but tailored to the application itself

3. Explain your rationale for your approach, and include additional materials in accordance with the ethics committee to which you are applying (<http://www.ethicsguidebook.ac.uk/Writing-your-ethics-application-198.html>)

References

RESPACC O4 [Research ethics Part 1](#) / [Research ethics Part 2](#)

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Real-world ethics in palliative care: A systematic review of the ethical challenges reported by specialist palliative care practitioners in their clinical practice. Schofield G et al, Palliative Medicine 2021;35(2):315-334

Measuring mental health outcomes in built environment research. Choosing the right screening assessment tools

<https://www.urbandesignmentalhealth.com/how-to-measure-mental-health.html>

Guiding Principles for Ethical Research. Pursuing potential research participants protection. <https://www.nih.gov/health-information/nih-clinical-research-trials-you/guiding-principles-ethical-research>



Project management

Introduction

Project Management refers to a set of activities which enables successful implementation of a project. A project may be defined as involving a group of interrelated activities that are planned and then executed in a certain order to create a unique output, within a specific time frame and within specific costs.

Timeline

Definition

Briefly, the project timeline represents the time allocated to get a project done.

The project scheduling plan implies a breakdown of the work structure with details about all the tasks, the person(s) allocated to the tasks and the start and end date of the task.

How to ... with examples

In larger projects, people depend on each other's work; so, decisions and timings have greater impact on completion of the project.

There are three purposes of a project schedule:

- The first, and the most well-known, is to make commitments about when things will be done. In this way, the schedule provides a form of informal contract between every person on a team or in an organization, confirming what each person is going to deliver over the next week, month or year.
- The second purpose of a schedule is to make everyone aware that one's work and effort is part of a whole. Everyone's work in the team is like a jigsaw puzzle piece - the final image being the project.
- The third purpose of the schedule is to give the team a tool to track progress and to breakdown work into manageable chunks.



Schedules need to be convincing, so they provide a basis for tracking and making adjustments, and have a probability of success that satisfies the team, the organization, or the funder of the project.

Example:

A Gantt chart, commonly used in project management, is one of the most popular and useful ways of showing activities of a project displayed against time. In the left side of the chart is the list of the project activities and along the top is the time scale including the project duration (months/years). Each activity is represented by a bar; the position and length of the bar reflects the start date, duration and end date of the activity. This will provide an overall image of the project including:

- What the various activities are
- When each activity begins and ends
- How long each activity is scheduled to last
- Where activities overlap with other activities, and by how much
- The start and end date of the whole project

To summarize, a Gantt chart shows you what has to be done (the activities) and when (the schedule).

Example Gantt template:

		Year 1				Year 2			
		Month1	Month2	Month3	Month4	Month 5	Month 6	Month 7	Month 8
Activity 1	Sub-activity 1.1								
	Sub-activity 1.2								
Activity 2	Sub-activity 2.1								
	Sub-activity 2.2								
	Sub-activity 2.3								
Activity 3	Sub-activity 3.1								
	Sub-activity 3.2								

Practical advice:

Because the schedule represents the totality of the project, the only way to use schedules effectively is to understand all activities that need to be done in order to make the project successful. This reflects the interdisciplinary aspect that needs to be considered when creating a project timeline.

Complex and/or large schedules should be divided into smaller schedules to minimize risks and enable the frequency of adjustments and the possibility of making changes in order to achieve the project aim.

Other Support material:

[How to Create a Gantt Chart](#)

[RESPACC Research for palliative care clinicians - YouTube](#) min 2:22

[RESPACC O4 How to implement a research project](#)

Costs

Definition

An important part of Project Management is the cost management. This covers the budget of the project activities and, by cost control, it ensures that the project stays within financial borders defined in the budgeting process.

How to ... with examples

In order to have an appropriate budget for the project, it is necessary to have an overall perspective of different types of costs that are generated by the project activities. There are three main categories of costs:

1. Staff costs: directly incurred costs of people who work on the project
2. Non-staff costs: equipment, travel, office costs, etc
3. Overheads: costs incurred by the institution hosting the project eg lighting, heating, etc. This is normally calculated as a percentage of the overall project direct costs but funders have different rates.

The project cost management's task in estimating cost is to examine the different possibilities to spend costs in various phases of the project.

It's only when the details are written down, with people's names next to them, that real calculations can be made and assumptions examined.

Example:

Illustration of one task cost estimate:

Task: Attorney consultancy				
Resource	Quantity	Usage	Cost/unit	Total cost
Personnel				
Project coordinator	0.25	1 day	200 €	50 €
Social worker	0.5	1 day	150 €	75 €
Lawyer	0.5	1 day	240 €	120 €
Equipment				
Computer/ Laptop	2	1 day	0	0
Other				
Travel	1	1 day	100 €	100 €

Lodging	1	1 day	100 €	100 €
Total				445 €

Overview of a project budget structure within Erasmus + projects:

Activity	Budget
Project management	
Transnational meetings	
Meeting 1 – kick-off	
Meeting 2 - Follow-up	
Meeting 3 - Final meeting	
Intellectual outputs	
Intellectual output 1	
Intellectual output ...	
Short-term trainings	
Short-term training 1 C 1	
Short-term training 1 C	
Multiplier events	
Multiplier event 1	
Multiplier event ...	
Total	

Practical advice:

As the value of labour costs is high, this must be well structured and covered, for direct and indirect labour.

For the project cost plan, it is important:

- To seek advice from a finance officer in the organization
- To obtain general information about material, equipment prices or other resource costs;
- To consider different procedures within the organization; information collected in prior projects (documents, records etc); uniqueness of the project (special contracts, acquisitions, legal implication etc)
- To be related to project schedule plan (include activities, their duration, resource requirements)
- To consider team's experience
- To check funders/sponsors requirements regarding budget format, eligible costs etc

Other Support material:

Overview of project activities with partners' budget included-template:

		Lead	Involved partners	Budget
Activity 1	Sub-activity 1.1			Partner1 Partner 2...
	Sub-activity 1.2			
	Sub-activity 1.3			
Activity 2	Sub-activity 2.1			
	Sub-activity 2.2			
	Sub-activity 2.3			
Activity 3	Sub-activity 3.1			
	Sub-activity 3.2			
	Sub-activity 3.3			

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Additional considerations

Introduction

Additional considerations include the impact of your research, acknowledgements and references for a grant proposal. A strong impact summary and plan of pathway to impact can make the difference between getting funded or not. Reference citations demonstrate evidence for the claims in your proposal and that you are aware of what has been done before.

Impact

Definition: Impact is the effect of the research after it has been adopted, adapted for use, or used to inform further research. An **impact statement** is a short, convincing explanation of how your project can have a positive effect on a larger community.

How to ... with examples

The impact statement should describe:

- (A) The **problem** you are trying to address.
- (B) How you plan to **address** that problem.
- (C) **Who** might benefit from this research.
- (D) **How** they might benefit from this research.

Impact statements focus should be on the "big picture," and avoid unnecessarily technical details and jargon. It is often useful to mention numbers to describe the potential impact of your work (e.g. number of potential beneficiaries).

Another important aspect related to impact is the Patient and Public Involvement concept (PPI) (PPI (Patient and Public Involvement) resources for applicants to NIHR research programmes, 2022). Patient/Public involvement can make research more relevant through:

- identifying a wider set of research topics than would have been generated just by academics and health or social care professionals suggesting ideas for new research
- ensuring research is focused on what matters to people - for example by prioritising symptoms that are of importance to patients with a particular condition
- helping to reshape and clarify the research

Example:

Through education, **the quality of life for oncological patients, the confidence and the independence of the carers will be improved. In this particular study**, the positioning of the subcutaneous butterfly with the bevel down ensures a better resistance of the subcutaneous butterfly in the insertion tissue, with less local complications and will make administration of pain medication via subcutaneously butterfly by family members a safe practice.

In high-income settings, only around 50% of people with elevated blood pressure have their condition adequately managed. In many low-middle income countries, the figure is under 10%. This equates to millions of people's lives affected yearly by preventable disease. The SMARThealth program is building capacity to assist over 3 million of these people by 2022.

Practical advice:

Clearly articulate impact goals -try to imagine this:

Visualise yourself at the end of your project having achieved an impact that everyone is talking about. Where are you and what can you see?

What has changed?

What are people saying about how they have benefited?

Focus on trying to identify the aspects of your work that you think people outside academia are most likely to be interested in. Then ask yourself why you think they might be interested in this aspect of the work.

List (and group) your stakeholders-here are some tips:

- *If you have limited knowledge and experience of stakeholders working in your area, team up with a colleague who knows more. If you have time and contacts, consider inviting someone from outside academia who works with the people you want to help, and get them to advise you on the key groups you need to reach out to*
- *For stakeholders, consider the relative interest each group or organisation has in your work, and their relative influence over your ability to achieve your impact goals. This influence could be negative (blocking you from achieving impact) or positive (enabling you to achieve things that would not have been possible without their help)*
- *For the general public, consider the extent to which different groups (e.g. demographics, interest groups) might benefit from your work*

Other Support material:

Stakeholder and Public Analysis Template (www.fasttrackimpact.com, 2022)

Name of organization, group or segment of the public	Likely interest in your research		What aspects of your research are they likely to be interested in? Identify key messages linked directly to your research for this group	What level of influence might they have on your capacity to generate impact and/or what level of benefit might they derive from the research?	Comments on level of influence and/or likely benefit (e.g. times or contexts in which they have more/less influence over the outcomes of your research, ways they might block or facilitate your research or impact, types of benefit they might derive from the research)	If influence is high but interest is low, how might you motivate greater interest and engagement with the research?

References

Definition: References demonstrate evidence for the claims in your research and show that you are aware of what has been done before. They also indicate the sources of the knowledge that is claimed. They are essential to prevent claiming other people's work as your own (e.g. plagiarism).

Focus on the few most relevant and most recent references, preferably those in international research journals.

How to ... with examples

If a list of references is to be included, it is placed at the end of the text. This section typically is not counted in the page limitation of the Research Description. Citing your sources is an important practice when it comes to any type of publishing. In academic research, it is standardized by many bodies. Publication venues like journals and conferences are quite strict about their formats.

Properly referencing a source is not only important that the right people get the proper recognition for their ideas. It is also crucial to the whole research publication and consumption process for the following reasons:

- **To Avoid Plagiarism** – Citations allow researchers to properly quote the work of others. It helps them acknowledge where the information came from.
- **Respect for Intellectual Property Rights** – Research work can include industry information legally protected by intellectual property rights.
- **To Provide Evidence** – Citing studies and data properly allows you to provide evidence for key points of your work. This is especially important when making a case for a position you take.
- **To Give Details on Source Documents** – Citations make it easier for reviewers to check for data and even the line of arguments. Also, it helps direct the readers to original sources where they can find more detailed information about the point you cited and the subject matter.

To know what information to include in a citation, use the style guide typically used for your field.

Examples

➤ **Format American Medical Association (AMA):**

Mason S, Paal P, Elsner F, et al. Palliative care for all: An international health education challenge. *Palliat Support Care*. 2020;18(6):760-762. doi:10.1017/S1478951520000188

➤ **Format American Psychological Association (APA)**

Mason, S., Paal, P., Elsner, F., Payne, C., Ling, J., Noguera, A., & Mosoiu, D. (2020). Palliative care for all: An international health education challenge. *Palliative & supportive care*, 18(6), 760–762. <https://doi.org/10.1017/S1478951520000188>

➤ **Format Modern Language Association of America (MLA)**

Mason, Stephen et al. "Palliative care for all: An international health education challenge." *Palliative & supportive care* vol. 18,6 (2020): 760-762. doi:10.1017/S1478951520000188

➤ **Format National Library of Medicine (NLM)**

Mason S, Paal P, Elsner F, Payne C, Ling J, Noguera A, Mosoiu D. Palliative care for all: An international health education challenge. *Palliat Support Care*. 2020 Dec;18(6):760-762. doi: 10.1017/S1478951520000188. PMID: 32209143.

Practical advice:

- It is best to check the author's instructions page on the journal websites and articles that have already been published for reference.
- Online citation managers are an easy way to keep track of all of your references.

- [EndNote](#)

It enables users to search online bibliographic databases, organize references and create and format instant bibliographies. It also contains an integration interface with Microsoft Word, as well as a traveling reference library that follows the document for easy collaboration with others.

- [Zotero](#)

Zotero is a free application that collects, manages, and cites research sources. It connects with your web browser to download sources.

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Conclusions

Medical and health services research have made a fundamental contribution to health and wellbeing over the last 50 years. Well-directed, high-quality research can answer important questions and provide evidence to inform decisions in clinical practice and policy development. Responding to this complex problem is highly relevant at the European level and needs a mixed cultural and innovative approaches to increase the evidence-based research in palliative care.

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