

Fact sheet 11: How do I write a research proposal?

This fact sheet aims to give you information to help you to understand:

- What to include when writing a research proposal and
- Factors which may influence how you structure your proposal.

It will also provide links to other useful fact sheets and documents that relate to research.

Purpose

Why are you writing a research proposal? Consider who your proposal is for and ensure that you adhere to any guidelines that have been set.

If you are writing a research proposal to submit to a funding organisation make sure that you fully understand the submission guidelines and make sure you stick to these. Many funding organisations will not accept proposals that do not adhere to their guidelines, regardless of how good the content is.

Make sure that you understand your audience, and ensure that the language you use is suitable. Do not assume that reviewers will be familiar with your chosen area of research. Explain any terms that are topic-specific and explain all acronyms the first time you use them. Many proposals are reviewed by panel members, patients and/or public who may not be fully aware of terms you regularly use with colleagues and/or within your organisation.

Your research proposal needs to be very concise. Many funding organisations set strict limits on the amount of words that you can write in your proposal. You need to ensure that your proposal is succinct, whilst ensuring that all key messages are included. Most funding organisations will ask you to complete an online form or document with boxes/sections asking for very specific information. The organisation will mark the form using strict criteria and you need to ensure you only include the appropriate information in each section.

Specify what the gaps in the knowledge are and what this research will add very clearly. Clearly define your outcomes, and ensure that your methods and analysis will appropriately measure these. See [Factsheet 7: Where can I find funding for my research project?](#) for further information on funding.

Development

Developing a research proposal can take a considerable amount of time. Make sure that you appropriately consider the time it will take to:

- Develop the research design
- Gather an appropriate team
- Calculate costs
- Review, comment on and revise proposal before submission

Consider who you need to assist you in writing the proposal, and know their capacity and time constraints. Allow plenty of time for people to contribute to the proposal (for example you may require a statistician to review and contribute to the analysis section, or a health economist to review and contribute to the cost-effectiveness analysis); this research proposal may be your priority but it might not be theirs! Remember that some organisations (i.e. universities) need to have all proposals and funding applications approved by their finance department. This can take many weeks so ensure you leave enough time for any external organisations you are working with (i.e. an academic health-economist) to follow all their internal procedures and protocols.

Have your proposal reviewed by experts in the topic area (such as your colleagues and peers), and also have your proposal reviewed by people who are not familiar with your proposed research area, to ensure your proposal is clear and easy to understand.

Delivery

Delivery relates to two parts of your research proposal:

1) The delivery of the proposed research

Provide clear detail of proposed research activities and timescales. Clearly outline and justify each research activity, along with detail of the team member/s responsible for each area (for example what will be involved in your preparation activities, recruitment activities, data collection, analysis, interpretation, reporting, and dissemination), and make sure that your timings for these are feasible.

It may help if you produce a flow diagram and/or a GANTT chart to plan your activities and timescales. This will help you to identify whether it will be feasible to undertake your project activities within the timescale. Some funding organisations will ask for a flow diagram to show proposed research activities against timescales.

2) The delivery of the research findings

Think about how you intend to use the findings of your research. Demonstrate what your findings will add to the existing knowledge base, and what you intend to do with these findings. For example, you may be wishing to conduct insight work to inform service delivery or future research; or test an intervention which will be incorporated into service delivery if successful.

Specifically outline how your findings will be delivered and communicated, and who they will be delivered by.

Methods

Ensure you justify your chosen methods and define how these will ensure you can confidently answer your research question.

You may wish to liaise with members of your target population (such as health professionals, patients and/or members of the public) to refine your chosen methods, and determine whether they are appropriate and feasible.

Clearly define and justify your analysis and sampling procedures. You will be expected to describe your chosen analysis procedures in detail.

If your research involves quantitative data you will be expected to describe the statistical tests you propose; if qualitative you will be expected to describe the analysis procedures you propose to follow; and if your research involves both qualitative and quantitative methods you will *also* be expected to outline how the findings will complement each other.

You will be required to provide evidence that the sample size you have chosen will be large enough for your research. You may need to ask a statistician to help you to calculate your required sample size.

See [Fact sheet 15. What are the best evaluation/research methods to use?](#) for further details about what type of methods you could use and Factsheet 10: how do I design my research project? for information regarding sampling procedures.

Research team

Clearly demonstrate that you have a team of people in place who are skilled and experienced in all elements of your proposed work. Funding organisations need to know that the proposed team will be able to deliver their research project on time and on budget, and will look for a team with the expertise to achieve this.

Consider the composition of your team when writing your proposal, and ensure you have experts in place. For example your research may specifically call for an experienced statistician, health economist, or qualitative researcher. You will need to describe the role of each team member, and describe their personal skills and expertise.

Funding organisations will expect research teams to have a skilled Principle Investigator, with proven experience of successfully managing research projects (including all research activities, team members and budgets). If your proposed Principle Investigator does not have a proven track record of this, it is fine to propose a skilled and experienced researcher to 'mentor' the Principle Investigator throughout the project.

Make sure that you are clear about how much time your team members can commit to the research project, if funded. You will be required to cost this into your research proposal. Ensure that this time is sufficient for project activities to be completed.

You may also need to recruit additional members of the research team if you are successful in winning the funding, such as a health professional to assist with recruitment, or a research assistant. You will need to describe the roles of each of these people in detail, and cost staff recruitment into your research proposal.

Patient and Public Involvement

This can often be a key part of a research proposal. It is important to consult with patients and the public to ensure that your approach and methods are feasible and acceptable within your defined population.

Elements of your research where patient and public involvement can be used include:

- *Defining the research question* - Work with people in your target group/s or groups of interest to help you to clearly define your research question. Explore whether your research question is a priority for your target group/s
- *Defining your research approach* - get input in determining where the best places to recruit participants may be. Also in writing and reviewing information and consent letters to be used in/connected with the project
- *Determine the feasibility of your proposed methods* - Your target group/s may be able to help you decide the most appropriate methods to use (such as in-home focus groups or an on-street survey, for example)

- *Develop your research tools* - Work with your target population to ask them to help you develop your research tools (examples may include developing suitable questions, ensuring your survey questions will be understood by your target group, or asking representatives from your target group to help you undertake your research)
- *Reporting the findings* - Consult with your target population to help you determine the most suitable way to report and share the findings in a way which will be easily understood and accessed by your target population

Many funding organisations will ask you to demonstrate that public and patient involvement plays an integral part of developing and delivering your proposed research.



More on this topic and further reading

http://www.shoulderdoc.co.uk/documents/research_flowchart.pdf

The National Institute for Health Research (NIHR) supports a number of funding streams for research in the NHS. If you are submitting your research proposal to one of these funding streams you can obtain help with writing your proposal from the Research Design Service (RDS). RDS North-West provides advice and support to local researchers, free of charge.

For further information please visit www.rds-nw.nihr.ac.uk/