

Concept Paper Assignment

Developing a Research Concept Paper with Stakeholder Input

Learning Objectives

After completion of this assignment, learners will be able to:

- 1) Develop and refine research questions.
- 2) Identify and engage key PBRN stakeholders who are relevant to their selected research topic.
- 3) Systematically gather stakeholder input and perspectives on the research topic and methods for studying it.
- 4) Develop and refine a research concept paper.

Introduction

In this key component of the program, you will develop a research concept paper. The concept paper is a means to develop your ideas into a research study using a flexible framework. Concept papers are useful for sharing research ideas with other investigators, PBRN members, community members, and funding agencies. You will capture input from key stakeholders about your topic and use it to develop and refine the study you will ultimately describe in the concept paper. Later in the program, you will write a Specific Aims section based on the final version of your concept paper. The recommended steps involved in developing the concept paper are provided below.

Steps

- 1) If you have not already done so, identify a research area of interest and narrow it to a specific topic. This is likely to involve consulting the research literature to determine what is known about the topic and identifying important gaps in existing knowledge. Keep track of the relevant literature as you will use it for the literature review section of the concept paper.
- 2) Draft a primary research question along with secondary research questions. The primary research question should ultimately be the focus of your study plan, while secondary research questions can address other predictors or outcomes. Useful resources are the readings by Cummings, Browner, and Hulley (2007)¹ and Kwiatkowski and Silverman (1998)². Keep in mind that you are developing preliminary research questions that may change as you work through the steps outlined here. Allow your mentor to review these preliminary research questions before moving ahead.
- 3) Answer the “Seven Questions to Get Started” (provided below) and discuss your responses with your mentor. Refine your ideas with your mentor’s input and your continued reflection on the questions and the research literature. Consult the research literature again if your research questions or your methods change. Iteratively compare what is already established in the research literature, what is

- not established in the literature (gaps), and what you are seeking to learn through a research study. Refine your research questions and methods as needed.
- 4) The characteristics of a good research question is that it be Feasible, Interesting, Novel, Ethical, and Relevant (which form the mnemonic FINER). Using the reading by Cummings, Browner, and Hulley (2007)¹ as a resource, determine if your research questions meet the FINER criteria. If any of the criteria are not met, modify your research questions and methods in the “Seven Questions to Get Started” document.
 - 5) Develop a study plan of no more than 1 single spaced page in length that contains the information from your “Seven Questions to Get Started.” Essentially, this will contain the contents of your ‘Seven Questions’ document with section headings in place of the 7 questions. For example, use the heading ‘Research Questions’ rather than ‘What is your research question (if it’s not finalized, what is it presently)?’ Write to a general audience and avoid using scientific jargon. Allow your mentor to review this document. Modify your 1-page study plan based on feedback from your mentor. Upload your 1-page study plan to CourseSites. **DUE DECEMBER 5.**
 - 6) With input from your mentor and PBRN leaders, identify key stakeholders to consult about your chosen research topic. These are individuals who are knowledgeable about the topic of your research or affected by it, and whose perspectives on your one-page study plan would be helpful. Depending on the focus of your study, this may include PBRN member clinicians and leaders, research investigators, patients, community members, or others.
 - 7) Develop a plan to engage and obtain input from the stakeholders at two points in time. The first time point will involve key individuals who read and provide input on your one-page study plan summary. The second time point will be after writing a draft of the concept paper. It may be useful to follow the Community Engagement studio^{3,4} framework for obtaining stakeholder input, or methods such as individual and group interviews. The PCORI Methodology Report⁵ also provides guidelines for engaging stakeholders in research. Obtain feedback from your mentor on your plan to engage stakeholders and modify as needed.
 - 8) Gather initial stakeholder input on your one-page study plan summary from Step 5 (this is the first time point). Capture their input in a systematic way (eg, audio recording, taking detailed notes, etc). Provide this information to your mentor and determine if it has the potential to change your study, and if so, refine the study plan accordingly. Upload your refined study plan to CourseSites.
 - 9) Write an initial draft of the research concept paper. The structure of the concept paper is outlined below. Write in a style that is appropriate for your target audience and refrain from using scientific jargon if your key stakeholders include community members or others who may not have much training in research methods. Submit the draft to your mentor for his or her input and then modify the concept paper as needed.
 - 10) Present or distribute the concept paper to relevant stakeholders for their critique (second time point) per Step 7. This may involve obtaining feedback from

- individuals and/or groups as described in step 7. Capture their feedback as described in step 8.
- 11) Incorporate stakeholders' input into the draft of your research concept paper, with guidance from your mentor.
 - 12) Finalize the concept paper and submit it to your mentor(s), PBRN Director for their input. Upload your final concept paper to CourseSites. **DUE MARCH 6.**
 - 13) Reflect on this process and write a brief reflection paper of 500-1000 words on what you learned. Address the following topics in your reflection paper:
 - a) Describe your experience of developing the "Seven Questions to Get Started" and working through the FINER criteria. Indicate where changes were needed based on the FINER criteria, the research literature, and input from your mentor.
 - b) Indicate how input from stakeholders affected your concept paper at each time point;
 - c) Assess the value of stakeholders' input to your concept paper;
 - d) Describe any challenges you encountered obtaining stakeholder input;
 - e) Based on your learning, indicate what you would do differently if you were to use this process to develop a concept paper in the future. Upload your reflection paper to CourseSites. **DUE MARCH 13.**

Structure of the Concept Paper⁶

Please include the following sections in your concept paper. The concept paper may be as few as 1500 words in length (3 single spaced pages) to as many as 5,000 words (10 single spaced pages) plus references.

Statement of the Problem — provides the purpose for the research. This section of the concept paper introduces the problem under investigation, addresses why the researcher wants to investigate this problem, and how the research findings may help. Supporting documentation, including statistical data if available, should be used to emphasize the need for this research. This section is one of the most important sections of the concept paper; it serves to gain the reader's attention and support. The first few sentences of the concept paper should intrigue the reader to spike his or her interest and encourage further reading.

As you begin to write the problem statement of your concept paper, consider why you believe that the problem is important. Consider how your study relates to previous work in the field. Finally, consider the theoretical and practical implications involved in your research project. A well-developed, concise, and clear problem statement will lay the foundation for a strong concept paper.

Preliminary Literature Review — provides identification of major literature that supports and validates the topic. The most successful research projects have been based on the research of predecessors, and this section of the concept paper should provide enough

of a description of previous research to plant seeds in the mind of the reader suggesting more information is needed. A strong concept paper is based on a wide-range literature review that is condensed into a summary of key points.

Goal Statement -- provides a broad or abstract intention, including the research goals and objectives. This part of the concept paper should tell the reader “who, what and when” regarding the research goal.

Research Questions -- provides a preliminary view of the questions that you will investigate. Research questions are based on theory, past research, experience, and need. These questions will direct the research methodology; their inclusion in the concept paper links the research problem with the methodology. For some, composing the research questions may be the most difficult part of the research project, or possibly the most difficult aspect of writing the concept paper. The questions will direct everything that will be done; therefore, it is important that they are accurate and focused on the main research problem. The research questions will specifically direct the research and the type of analyses conducted.

Methods -- provides the methods for how to conduct the research and analyze the data. The goals and research questions identified in previous sections of the concept paper should directly relate to the research methods described in this section. Specify the study design and describe the methods that you plan to use for recruitment, data collection, analysis, instrument design, and any other components of the project. You have the option to write an abridged methods section or a fully detailed method section.

Timeline -- provides a range of time for completion of the project, highlighting key elements for each stage of the project. This section provides structure for managing sections of the project within a realistic time frame.

References -- provides references to the material cited in the literature review and elsewhere in the concept paper.

Seven Questions to Get Started

1. What is your research question (if it's not finalized, what is it presently)?
2. What already is known about this topic?
3. Who will be the participants in the study? Or, if you will you be using existing data, what data source(s) will you use?
4. What will the study measure or assess?
5. How will you collect data? (or access existing data?)
6. What feasibility issues do you need to consider? (access to population/data, time, skills, funding, etc.)

7. Why is the study worth doing?

References

1. Hulley, Stephen B.; Cummings, Steven R.; Browner, Warren S.; Grady, Deborah G.; Newman, Thomas B. *Designing Clinical Research, 3rd Edition*. Philadelphia: Lippincott Williams & Wilkins, 2007.
2. Kwiatkowski T, Silverman R. Research fundamentals II: Choosing and defining a research question. *Academic Emergency Medicine*, 1998;5(11): 114-117.
3. Joosten YA, Israel TL, Williams NA, Boone LR, Schlundt DG, Mouton CP, et al. Community engagement studios: a structured approach to obtaining meaningful input from stakeholders to inform research. *Acad Med*. 2015 Jun 23. [Epub ahead of print].
4. Meharry-Vanderbilt Community Engaged Research Core. *Community Engagement Studio Toolkit*. Vanderbilt Institute for Clinical and Translational Research. <https://victr.vanderbilt.edu/pub/community/>
5. PCORI (Patient-Centered Outcomes Research Institute) Methodology Committee. 2013. "The PCORI Methodology Report." <http://www.pcori.org/assets/2013/11/PCORI-Methodology-Report.pdf>
6. American Psychological Association (2010). *Publication manual of the American Psychological Association (6th ed.)*. Washington, DC: American Psychological Association, 2010.