

Preparing a Collaborative Research Concept Paper

GROW Learning Together

A step-to-step guide for beginners

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What is a Collaborative Research Concept Paper?

- Preliminary outline of a research project
- Concise summary – not a full proposal
- Describe main information about research project
 - Problem, research question, significance, methods
- Useful to organize and share your ideas into research study
- Capture input from collaborators

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Components of a Collaborative Research Concept Paper

Collaborative Research Concept					
Title	Introduction/Background	Methods	Significance	Timeline	Budget
<ul style="list-style-type: none"> • General information of what the proposed study is about 	<ul style="list-style-type: none"> • Literature review • What is known • What is unknown • Problem statement • Research question • Objectives 	<ul style="list-style-type: none"> • Population • Type of research • Type of data, instruments or tools to be used 	<ul style="list-style-type: none"> • What would you expect to obtain from this research project 	<ul style="list-style-type: none"> • How much time will take the main activities of the study 	<ul style="list-style-type: none"> • General description of cost and expenses

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What I need before starting to work on a collaborative research concept paper? (1)

- Identify a topic of interest
- Literature review
- Ask the following questions? (based on literature review)
 - What is known about the topic - understand the topic
 - What is not known about the topic
 - What is the gap for my population

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Literature Review

- Allow us to better understand the problem
- Summarize relevant studies and findings
- Highlight research gaps your research will address

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What I need before starting to work on a collaborative research concept paper? (1)

- Identify a topic of interest - *screening for colorectal cancer*
- Literature review
 - Colorectal cancer screening among Hispanics
 - Colorectal cancer screening in Puerto Rico
 - Colorectal cancer screening barriers
- Ask the following questions? (based on literature review)
 - What is known about the topic - understand the topic
 - Screening for colorectal cancers, is essential for early detection and treatment
 - Disparities in screening rates persist, with underserved communities disproportionately affected.
 - Low screening rates for colorectal cancer in "my population"
 - What is not known about the topic? - What is the gap for my population?
 - Why does "my population" have low screening rates

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What I need before starting to work on a collaborative research concept paper? (2)

- Identify a research idea
 - From clinical experience
 - From literature review
- Identify a research question
 - Clear
 - Concise
 - Can be answer through a research study
- Define your study objectives



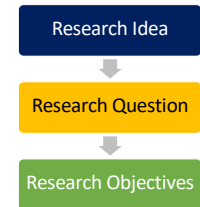
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What I need before starting to work on a collaborative research concept paper? (2)

- Identify a research idea - *study why screening for colorectal cancer is low in "my population"*
 - From clinical experience
 - From literature review
- Identify a research question
 - Clear
 - Concise
 - Can be answer through a research study
- Define your study objectives



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Formulating the research question

Problem	Low screening rates for colorectal cancer in my population
Known	<ul style="list-style-type: none"> Screening for colorectal cancers, is essential for early detection and treatment Disparities in screening rates persist, with underserved communities disproportionately affected. Low screening rates for colorectal cancer in "my population"
Unknown	Why does "my population" have low screening rates?
Broad research question	What are the socioeconomic, clinical or health services factors associated with non-compliance with colorectal cancer screening recommendations in "my population".

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From a broad research question to a more specific research question

Problem	low screening rates for colorectal cancer
Broad Research question	What are the socioeconomic, clinical or health services factors associated with non-compliance with colorectal cancer screening recommendations in "my population".
Topic	
Output	
Who is my population of interest?	
What factors should I focused on?	

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From a broad research question to a more specific research question

Problem	low screening rates for colorectal cancer
Broad Research question	What are the socioeconomic, clinical or health services factors associated with non-compliance with colorectal cancer screening recommendations in "my population"? – need to be refined
Topic	Colorectal cancer screening
Output	Non-compliance with screening recommendations
Who is my population of interest?	Low income Adults 50-75 years Specific comorbidity (diabetes, IBD, hx cancer, etc.)
What factors should I focused on?	Socioeconomic: low income, education, health insurance, health literacy Clinical: family hx, comorbidities, clinical indicators Health services: insurance, primary care services, subspecialty care, etc.

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From a broad research question to a more specific research question

Problem	low screening rates for colorectal cancer
Broad Research question	What are the socioeconomic, clinical or health services factors associated with non-compliance with colorectal cancer screening recommendations in "my population"? – need to be defined
Topic	Colorectal cancer screening
Output	Non-compliance with screening recommendations
Who is my population of interest?	Low income Adults 50-75 years Specific comorbidity (diabetes, IBD, hx cancer, etc.)
What factors should I focused on?	Socioeconomic: low income, education, health insurance, health literacy, transportation Clinical: family hx, comorbidities, clinical indicators Health services: insurance, primary care services, subspecialty care, etc.

How is the patient's socioeconomic status associated with non-compliance for colorectal cancer screening recommendations in adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?
 ↓
 How are the patient's income level and access to transportation associated with non-compliance for colorectal cancer screening recommendations in adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?

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From a broad research question to focused research objectives

Problem	low screening rates for colorectal cancer
Broad Research question	What are the socioeconomic, clinical or health services factors associated with non-compliance with colorectal cancer screening recommendations in "my population"? – need to be refined
Topic	Colorectal cancer screening
Output	Non-compliance with screening recommendations
Who is my population of interest?	Low income Adults 50-75 years Specific comorbidity (diabetes, IBD, hx cancer, etc.)
What factors should I focused on?	Socioeconomic: low income, education, health insurance, health literacy, transportation Clinical: family hx, comorbidities, clinical indicators Health services: insurance, primary care services, subspecialty care, etc.

Good Research Objectives

S Specific

M Measurable

A Achievable

R Relevant

T Time-bound

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From a broad research question to focused research objectives (what you aim to achieve)

Good Research Objectives	SMART Objectives			
	Socioeconomic	Clinical	Health Services	
	What are the socioeconomic, clinical or health services factors associated with non-compliance with colorectal cancer screening recommendations in "my population"? – need to be refined	To determine the association between income level and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico	To investigate the association between history of diabetes and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?	To evaluate how access to primary care physician is linked to non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?
	S Specific	M Measurable	A Achievable	R Relevant
	T Time-bound			

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What I need before starting to work on a collaborative research concept paper? (3)

- Identify the methods to be used - Plan on how to conduct the research
 - Define the **population for the study**
 - Define the **type of study** that you would like to do
 - Ex. Describe, compare, identify if an intervention works
 - Define **what information** you need from the population (variables)
 - Decide if you need to collect new information or use existing data
- Define **how** would you conduct this project in the clinical setting

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From research objectives to methodology (describe the research design and methods)

	SMART Objectives		
	Socioeconomic	Clinical	Health Services
Study objective	To determine the association between income level and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico	To investigate the association between history of diabetes and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?	To evaluate how access to primary care physicians is linked to non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?
Methods	We will analyze electronic health records from three rural primary care centers in Puerto Rico to identify individuals who did not receive a colorectal cancer screening within the past 10 years and compare this group to those who are up-to-date on screenings based on income level.	We will conduct a survey among adults aged 50-75 receiving services in three rural primary care centers in Puerto Rico to assess their history of diabetes and their completion status of colorectal cancer screening.	We will interview primary care physicians from three rural primary care centers to understand their experiences with referring patients for colorectal cancer screening and explore challenges related to patient access.

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From research objectives to methodology

	SMART Objectives		
	Socioeconomic	Clinical	Health Services
Study objective	To determine the association between income level and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico	To investigate the association between history of diabetes and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?	To evaluate how access to primary care physician is linked to non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?
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Study population			
Type of study			
Feasibility			
Data to be collected			

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From research objectives to methodology

	SMART Objectives		
	Socioeconomic	Clinical	Health Services
Study objective	To determine the association between income level and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico	To investigate the association between history of diabetes and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?	To evaluate how access to primary care physician is linked to non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?
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Study population (inclusion and exclusion criteria)	Adults aged 50 – 75 years receiving services in three rural primary care centers in PR	Adults aged 50 – 75 years receiving services in three rural primary care centers in PR	Primary care physicians
Type of study			
Feasibility			
Data to be collected			

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From research objectives to methodology

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Study population (inclusion and exclusion criteria)	Adults aged 50 – 75 years receiving services in three rural primary care centers in PR	Adults aged 50 – 75 years receiving services in three rural primary care centers in PR	Primary care physicians
Type of study	Retrospective analysis of EHR	Cross sectional study	Quantitative study (focus groups or in-depth interviews)
Feasibility			
Data to be collected			

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From research objectives to methodology

	SMART Objectives		
	Socioeconomic	Clinical	Health Services
Study objective	To determine the association between income level and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico	To investigate the association between history of diabetes and non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?	To evaluate how access to primary care physician is linked to non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years old receiving services at rural primary care centers in Puerto Rico?
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Study population (inclusion and exclusion criteria)	Adults aged 50 – 75 years receiving services in three rural primary care centers in PR	Adults aged 50 – 75 years receiving services in three rural primary care centers in PR	Primary care physicians
Type of study	Retrospective analysis of EHR	Cross sectional study	Quantitative study (focus groups or in-depth interviews)
Feasibility	Do you have access to the data?	Do you have the human resources or technology needed to conduct the survey?	Do you have access to primary care physicians?
Data to be collected			

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From research objectives to methodology

	Socioeconomic	Clinical	Health Services
Study objective	To determine the association between income level and non-compliance with colorectal cancer screening recommendations among adults 50-75 years old receiving services at rural primary care centers in Puerto Rico	To investigate the association between history of diabetes and non-compliance with colorectal cancer screening recommendations among adults 50-75 years old receiving services at rural primary care centers in Puerto Rico?	To evaluate how access to primary care physician is linked to non-compliance with colorectal cancer screening recommendations among adults 50-75 years old receiving services at rural primary care centers in Puerto Rico?
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Type of study	Retrospective analysis of EHR	Cross sectional study	Quantitative study (focus groups or in-depth interviews)
Feasibility	Do you have access to the data?	Do you have the human resources or technology needed to conduct the survey?	Do you have access to primary care physicians?
Data to be collected (Variables)	Income, screening status Age, sex, municipality, education, health insurance, marital status, comorbidities, etc.	Diabetes, screening status Age, sex, municipality, education, health insurance, marital status, comorbidities, disease severity, etc.	Practices, perceptions, barriers, concerns, experiences,

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Significance

- Explain the potential impact of your research
- Discuss potential contributions and implications
- Why is this study worthy?

“This study will allow us to determine the associations between socioeconomic factors, clinical factors, and health services factors with non-compliance with colorectal cancer screening recommendations among adults 50 – 75 years receiving services in primary care centers in Puerto Rico in order to identify potential targets for interventions aimed at increasing screening rates and reducing colorectal cancer disparities.”

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What else I need to plan for?

- Timeline
 - How much time will be required to complete all the phases of your study
- What other resources I need?
 - Human resources
 - Incentives for participants
 - Funding sources

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Timeline (examples)

Activity	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
IRB submission and approval	X	X											
Participants recruitment and interviews			X	X	X	X	X						
Data analysis					X	X	X	X	X				
Manuscript preparation										X	X	X	

• Estimate how much time will be needed for all the activities related to the study

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Budget – Estimating cost and expenses

- Provide an overview of the budget if applicable
- Include cost associated with study coordination, recruitment, IRB, data analysis, incentives for participants, etc.
- Example:

“ The total budget for this research project is estimated at \$20,000. These fund will be covering expenses such as community outreach activities for recruitment, screening equipment, and data analysis. In-kind contributions from partnering healthcare institutions and community organizations will also be leveraged to maximize resources”.

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References


- List all references used in preparing the collaborative research concept paper
- Include references from studies done locally if available
- Use the same format for all the references included

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GROW Collaborative Research Concept Submission



<https://redcap.link/GROW-CRCForm>

Collaborative Research Concept Form

Instructions:
 GROW Puerto Rico Network Members, collaborators, and potential members are welcome to submit their collaborative research concepts, ideas, or proposals to the network team.
 Please make sure you complete this form in all its parts. If you have any questions regarding the submission of this form, please feel free to contact Dr. Carlamarie Noboa, GROW PR Network Co-Leader for support, carla.noboa@upr.edu.
IMPORTANT: Please do not forget to click at the end "Submit" if you completed this form or "Save and Return Later" if you need to complete this form later.

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GROW Collaborative Research Concept Submission

A. Research Team Information

Provide the contact information of the Main Principal Investigator of the proposed research.

Last Name:

First Name:

Organizational Affiliation: If there is not affiliation in an organization enter "No Affiliation"

Highest Degree completed:

Phone Number:

Mobile Phone Number:

Email address:

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GROW Collaborative Research Concept Submission

A. Research Team Information

Provide the contact information of the key person for research-related information and follow up if different of the PI described above.

Specify role in this research:

Do you plan to do this research in collaboration with other GROW Network members? Yes, I have collaborators from GROW Network. Yes, I would like to identify collaborators from GROW Network. No. I don't know next

Do you have a research team established? Yes No next

Will you need support creating a research team? Yes No next

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GROW Collaborative Research Concept Submission

4. Collaborative Research Project Information

Research project title or tentative title:

*most provide value

Main area of the proposed collaborative research:

*most provide value

- Quality improvement
- Patient care, continuity and coordination of care
- Clinical decision support, patient decision making
- Organization and clinical systems
- Behavioral health research
- Public health research
- Comparative effectiveness
- Implementation and dissemination research (evidence-based interventions)
- Other

next

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GROW Collaborative Research Concept Submission

What is the general topic addressing this research proposal?

Background section: Please answer the following questions based on supporting literature review. (MAX. 500 words)

- What is known about the topic addressing this proposal?
- What are the gaps in knowledge addressing this proposal?
- What is the problem addressing this proposal?
- What is your research question?
- What are the proposed research project objectives?

*most provide value

500 words remaining Expand

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GROW Collaborative Research Concept Submission

Proposed Research Idea:

- How would you conduct this research? (MAX. 500 words)
 - Describe the population in which the research will be conducted including inclusion and exclusion criteria.
 - Describe the type of research that you would like to do.
 - Describe the type of data, instruments or tools to be used.
 - How would you apply this research in a clinical setting?

*most provide value

500 words remaining Expand

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GROW Collaborative Research Concept Submission

What is the significance of this research project?

- What would you expect to obtain from this research project? (MAX. 250 words)

* must provide value

250 words remaining Expand

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GROW Collaborative Research Concept Submission

Timeline for conducting the research (in months).

Please upload a table with the proposed timeline and main activities for conducting the research in months. At least one year should be considered.

* must provide value

[Upload file](#)

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GROW Collaborative Research Concept Submission

Budget for conducting the research.

Provide general description of the costs and expenses related to the proposed research.

* must provide value

Expand

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GROW Collaborative Research Concept Submission

References (at least 5 references should be included).

Please list the references and use the same format for all the references included.

Expand

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GROW Collaborative Research Concept Submission

Please describe any need you might have to successfully develop and implement this collaborative research.

Expand

Date completed:
* must provide value

This form was completed by:
* must provide value

Last Name, First Name

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GROW Collaborative Research Concept Submission

Your collaborative research concept form will be evaluated by the GROW FR Network and Alliance staff and feedback will be provided by email within 14 days after submission. If your idea is recommended for further support of the Hispanic Alliance to Clinical and Translational Research Cores, information will be provided on the process to expand and support your idea proposal.

Please use the information provided in the presentation: "Preparing a Collaborative Research Concept Paper: a step to step guide for beginners" as reference for completing this form.

Submit

Save & Return Later

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After Submission

- Provide feedback with recommendations
- Facilitate the access to Alliance resources and experts
- Develop a plan for the next research steps
- During this year, we will prioritize two collaborative research projects from GROW PR Network Memberships

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Remember

Collaborative
Research
Ideas/Projects

<https://redcap.link/GROW-GRC-Form>



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Complete Evaluation Form



Let us know your feedback and experience!



<https://releap.link/GI-T->

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Next meetings

GROW Membership Meeting
June 25, 2024
10:00am – 11:00am

GROW Learning together
Aspectos éticos y consentimiento informado
August 27, 2024
10:00am – 11:00am

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