

Emergency Medicine Research Proposal Template

Project Title

Date

Principal Investigator name

Other Investigators (if known)

How to use this template

- The below slides are intended to help you present, and critically think through your proposed research project.
- Use the slides that apply to your study type (Clinical vs. Education). **The text in red provide examples for you to follow.** Fill in your own information and delete the red text.
- If you don't have information to fill out some of the slides, that's OK! We want to help you design a study that will be academically productive for you as an investigator, is scientifically sound, and will make good use of resources.
- The feedback you get from the process of putting these slides together, and from presenting the idea, should help make your proposal excellent.

Background and Significance (Clinical)

- Background statistics on the subject matter (ie, pain, MI, sepsis, etc)
 - Example: “40% of patients meeting early sepsis criteria do not receive antibiotics within 2 hours.”
- ED incidence/prevalence
 - If this is relevant to your study
- Impact of the subject matter (“MI affects 10% of patients over 50”)
- Why this subject is important to study

Background and Significance (Education)

- Background statistics or conceptual model supporting your research focus
 - ACGME guidelines require the completion of a quality improvement project; however, it is unclear how this requirement is being implemented
- Impact of the subject matter
 - Example: Impacts all ED residency programs
- Why is this important
 - No best practices exist for implementing this requirement

Background and Significance (QI)

- State the clinical problem you wish to address
- Describe how the clinical problem impacts patient care

Hypothesis

- Research Question
 - Will prehospital steroid administration to pediatric asthma patients reduce hospital admission rates?
- How will answering this question change management for this condition or inform science/medical education
- Study Hypothesis
 - We hypothesize that prehospital steroids will reduce hospital admission rates after adjusting for disease severity and demographics.
- Primary outcome
 - Hospital admission

Aims

- Usually 2-3 Aims
- Each Aim clearly states how you will test your hypothesis and answer your study question
 - If you have never written specific aims or don't feel comfortable, that's okay, you can leave this section blank
 - **Example: To measure the association between early, effective antibiotics and in-hospital mortality in ED patients with sepsis.**

Approach

- For the following slides, do your best. Don't feel like you have to know the answer to all of the following questions.

Approach

- Study design (observational, experimental, survey, meta-analysis, etc)
 - Be specific if you can (randomized, non-randomized, prospective cohort, etc.)
- Participants:
 - Define study population
 - Who are your subjects?
 - Inclusion/exclusion criteria
 - Subject number (include power calculations if indicated)
 - How many subjects
 - Recruitment plan
 - How? When? Who?

Approach (Experimental or Observational Design)

- Intervention (a prognostic factor, treatment, training, etc.)
 - Note if no intervention planned
 - Observational studies will not have an intervention
- Comparison intervention or control condition (if applicable)

Approach

Outcome measures:

- Predictor (IV) and outcome (DV) variables
- Covariates / controls
- Data source(s)
- Data collection method

*Consider relevant outcomes from the perspective of the clinician, patient, family, payer, healthcare administrator

Approach

Analytic plan:

- Qualitative, quantitative, mixed
- Statistical tests you will perform, if relevant (*For QI/PI, this may involve a statistical process control chart*).
 - *Who?*
 - *How?*

Study Limitations

- All studies have limitations
- Describe study limitations and the actions you'll take to minimize them.

Timeline

- Prepare a timeline to map out goals for project completion
- Example
 - April 1st IRB protocol completion/submission
 - May 1st – anticipated IRB Approval
 - May 15th 2018 – initiate patient enrollment
 - May 15th 2019 – complete patient enrollment
 - May – July 2019 – data entry completion, verification, data cleaning and analysis
 - August – abstract/manuscript preparation and submission

Funding Opportunities

*Funding is not a requirement, but we want to help you secure funding if possible!

- Has funding already been acquired?
- If not, what funding opportunities have you investigated that may fund this type of work
- Future grant deadlines

Resources

- <https://hscj.ufl.edu/emergency-medicine/research/Resources.aspx>
- Personnel to be involved and their time (e.g., statistical help, survey design, qualitative analysis)
- Research equipment
- Budget (if applicable)

Human Subjects

- Do you need to submit an IRB or does your primary mentor have one?
 - <https://hscj.ufl.edu/emergency-medicine/research/Resources.aspx>
 - Is your IRB training up to date?
- Is this QI?
 - Same link as above

Scholarly Work and Future Goals

- Local, Regional, National, International presentations?
- Publications? Peer-reviewed, non-peer reviewed, etc.
- What are your future plans after this project is completed?