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 1\textsuperscript{st} IRB protocol completion/submission
  • May 1\textsuperscript{st} – anticipated IRB Approval
  • May 15\textsuperscript{th} 2018 – initiate patient enrollment
  • May 15\textsuperscript{th} 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](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](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?