# Feedback

Overall this is a well written proposal. The only criticisms are vagueness in definition of some covariates the methods (not strictly required for the proposal but useful to have clarified). The organization of the proposal is good and the writing style is clear. You have greatly improved on the previous proposal by clarifying the hypothesis and objectives, well done!

## Detailed comments

* Background - good, gives a nice introduction to the concepts needed to understand the study
* Research Hypothesis - excellent - falsifiable and feasible.
* Research Questions and Objectives
  + “and for patients of different ethnicities, ages, and diagnoses on admission” - if done individually, there will be a lot of tables to sift through. Have you considered utilizing a model to adjust for these factors?
* Study Population
  + Good inclusion criteria
  + Specify how you will define ESRD - if you use ICD-9 codes, then you have to be careful as billing practices change over 10 years
  + You’ll need to define a window of admission for “admission creatinine” - i.e. 24 hours before admission. You may also need a rule for patients with no creatinine measured in this period (for example, you may want to exclude them, if so specify this).
* Study Outcomes
  + “Metavision” is the database used from 2008-2012 - if you are only using patients admitted under Metavision, you should specify this in your study population
  + You will need to flesh out your definition of dialysis in more detail among your group. For example, the existence of a dialysis line does not guarantee they are receiving a specific form of dialysis - you’ll need to work out in more detail how you will identify hemodialysis vs. CRRT
  + How will urine output/lactate/BUN be used as outcomes?
* Covariate of Interest
  + You don’t have diagnosis on admission (the ADMISSIONS table diagnosis is not reliable) - you only have ICD-9 diagnoses on discharge
  + You have a minimum of 2\*2\*2\*3 = 24 groups (8 for each feature of MAP). This is a lot of data to interpret so you may want to consider a different approach such as a method which matches positive patients to similar control patients to form two comparison groups.
* Conclusions
  + Good discussion of the limitations and how future research could improve upon your study

## Grading

* Defining the problem and putting it in context (i.e., where is the gap in knowledge?)

**5/5**

* Identifying the elements of the study (outcome, population, covariates, etc)

**5/5**

* Technical Aspects (Identifying where those elements are going to come from)

**4/5**

* Project Feasibility

**5/5**

* Writing Style / Efficient Use of Space

**5/5**

**TOTAL GRADE: 24/25**