Dear Dr. Karpowicz, October 25, 2016

Thank you for your VICTR resource request VR22383 titled ‘Examining the impact of a discharge prescription service on hospital readmissions at Vanderbilt University Hospital’. It has been pre-reviewed by VICTR. Your submission will be processed for committee review upon receipt of your responses to the pre-reviewers questions provided below.

* **If you need to discuss the pre-review question/comment before responding please contact the specific reviewer listed.**
* **Please respond within this document and send to me at** **diana.m.andrew@vanderbilt.edu** **at your earliest convenience along with a revised research proposal if you make any edits.**

The comments/questions resulting from the **biostatistics** pre-review are provided below:

You may also attend a free biostatistics walk-in clinic for initial guidance with this. Sign-up and details are available at <http://biostat.mc.vanderbilt.edu/wiki/Main/Clinics>.

Reviewer: Dan Byrne (daniel.byrne@vanderbilt.edu)

1. Do you have funds or dedicated time for someone to export these data? We have a dedicated person to export the data before analysis.
2. There were at least 24 different groups at Vanderbilt working to reduce readmissions during this period. How will you attribute meds-to-beds to any changes that you might see in readmissions? To the best of our knowledge, we are the only group at Vanderbilt specifically examining the impact of the discharge prescription service on hospital readmissions. By providing medications to patients before they leave the hospital, this immediately prevents any noncompliance issues that may occur if patients are unable to physically obtain (or forget to obtain) medications post-discharge. We agree that Meds-to-Beds is just one cog in a larger wheel of readmission studies at Vanderbilt University Medical Center and that we would be unable to conclusively state that Meds-to-Beds impacts readmissions on its own, but our goal is to demonstrate that it is a valuable pharmacy service that, together with other readmissions programs, improves outcomes for both patients and the institution.
3. There is a cost to meds-to-beds and there is a value to the pharmacy of creating these new customers. How do you plan to measure the cost and benefit? If you do not see a reduction in readmissions will you stop the meds-to-beds program or does it have a financial value that outweighs that? We plan to use medication cost data that has already been incurred with the program’s daily operations. For readmissions, we plan to obtain an average hospitalization cost during the study time frame and use that as a proxy estimate for calculating the hospital cost avoidance saved by Meds-to-Beds. If we do not see a reduction in readmissions, we do not plan to stop the program, as it has both a financial benefit to the organization as well as an altruistic benefit as an added service for patients upon discharge.
4. It would be best to randomize to know the impact of meds-to-beds. Please clarify your choice not to randomize? We agree that randomization would be the best statistical option for assessing the impact of Meds-to-Beds; however, this project is on a limited time frame as a result of being a resident research project that must be completed within the year. Utilizing a historical group comparison (Meds-to-Beds vs. non-Meds-to-Beds) is the next feasible option that allows us to examine outcome differences between the two groups within the time limitations imposed by the residency.
5. Please bring this to Biostatistics Clinic to discuss. They can help you with the sample size and analysis plan.

**Please email this document with your responses to the above comments/questions at your earliest convenience to** **diana.m.andrew@vanderbilt.edu****.**

Thank you,

Diana M. Andrew, M.S.

Scientific Review Analyst II

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