

ASHP Foundation Pharmacy Resident Health Services Research Grant

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1.) Abstract of Proposal

Title: Comparison of Metoprolol Succinate versus Carvedilol in Time to Decompensation in a Veterans Affairs Healthcare System; A Pilot Study

Objective: The purpose of this study is to determine which β -Blocker and dosage is the most effective therapy for heart failure patients in preventing hospital admissions. The results will be applicable to both the experienced heart failure patient as well as the newly diagnosed heart failure patient who may be β -Blocker naïve. While the ACC/AHA recognizes three β -Blockers with proven morbidity and mortality benefits, little is known with regard to therapeutic effectiveness variation. It would be beneficial for healthcare systems and patients alike to know which therapy is the most effective treatment for heart failure to decrease hospitalizations and delay first admissions.

Methodology: A retrospective chart review of the medical records of patients within the VA Boston Healthcare System database from January 1, 2006 through December 31, 2009 will be conducted. Pharmacy records will be reviewed for metoprolol succinate and carvedilol prescriptions. Subjects will be included in the study analysis if they were seen in heart failure clinic at VABHS between 2006 through 2009, are taking either metoprolol succinate or carvedilol, and have a recorded heart rate between 60-80 bpm. Subjects will be divided into two treatment arms depending on therapy given at enrollment: (1) those prescribed metoprolol succinate and (2) those prescribed carvedilol. The patients will be further subdivided into dosage categories within each treatment arm that correspond to approximate equivalent doses between the two study medications. Charts will be reviewed for the primary end points: time to first heart failure readmission, emergency room visit, or death. Frequency of readmission rates and emergency room visits will be assessed over a one year time frame from enrollment as secondary endpoints. All patient data will be purged and de-identified immediately after collection.