## Abstract

**Background**: Persistent gaps exist in the routine up-titration of pharmacological therapies for heart failure patients with reduced ejection fraction (HFrEF.) Despite improved survival and reduced hospital readmissions when HFrEF patients are up-titrated to evidence-based guideline-directed medical therapy (GDMT) targets, fewer than 25% of eligible patients are currently at GDMT target dosages. This project aims to improve the medication optimization of heart failure patients within the Transitional Care Unit (TCU) setting via an educational intervention targeting TCU/outpatient providers.

Methods: The educational intervention took the form of a virtual presentation delivered during a routine provider meeting. The educational intervention discussed the importance of successfully up-titrating patients to GDMT targets or the maximum tolerable dosages. An overview of the GDMT targets and the steps to successfully up-titrating patients were also provided. A survey questionnaire asking providers about their knowledge of GDMT and current practices was completed prior to the intervention (baseline) and again six weeks later (follow-up). The participating clinics have also implemented a mandatory EPIC smart-phrase automating the titration monitoring in provider notes. This approach provides an objective measurement of provider practices and enables monitoring of the percentage of TCU patients up-titrated monthly.

**Results:** 27 providers were recruited for this study. The baseline survey received a response rate of 37% (10/27), and the follow-up survey received a response rate of 41% (11/27). These data were analyzed with independent-sample t-tests and the Wilcoxon Signed-Rank test to evaluate the hypothesis that the mean value of knowledge would increase in response to the educational intervention compared to the null hypothesis of no change. The increase in knowledge scores, from  $6.30 \pm 1.25$  to  $7.29 \pm 1.25$ , was not significant at the alpha=0.05 level.

**Recommendations:** Based on the positive outcome of this study, Institutional support will be sought to sustain this project by making the educational intervention part of the new hire process.