Transitioning Low-Risk Cardiology Patients to a Combined Hospitalist-Cardiology Service

Carson Keck MD and Zain Gowani MD and the General Cardiology Fellowship
Medical University of South Carolina, Charleston, SC USA

Introduction

Multiple studies have evaluated cardiology primary versus hospitalist care showing mixed data on quality outcomes related to service-type for cardiology patients. At MUSC over the past several years, there has been a dramatic increase in the number of cardiology patients, that has outstripped cardiology service availability, leading to capped services, delays in care/procedures and possible impact on patient morbidity and mortality. The cardiology division, with help from the hospitalist division, created a new service line of hospital managed, cardiology consulted patients to target low-risk cardiology patients or those following a clear clinical pathway, including Low-risk chest pain rule-out, atrial fibrillation, tikosyn admission, and uncomplicated post-procedure patients.

Objectives

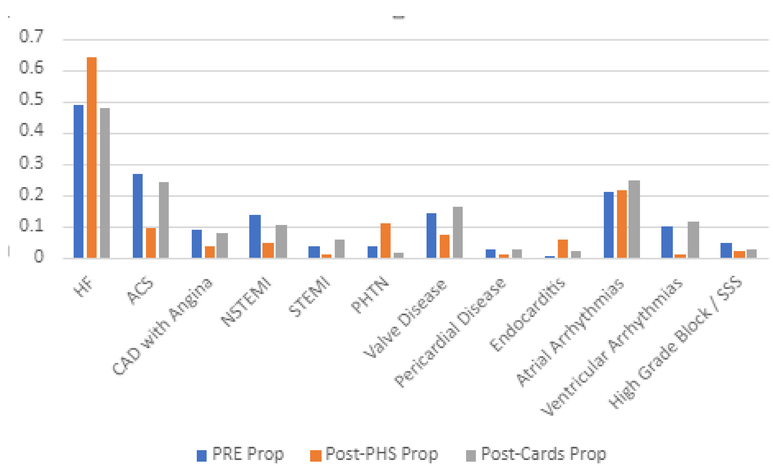
The purpose of this intervention was to risk stratify low-risk cardiology patients to hospitalist service, based on procedural and adverse outcomes, length of stay, mortality, utilization metrics, and post-procedure complications.

Evaluation and Methods

We evaluated patients three months prior to intervention and 3 months after intervention following a one month run-in period. ICD-10 diagnosis and procedure codes and quality metrics were utilized for analysis.

Main Results

Distribution of Cardiac Diagnoses

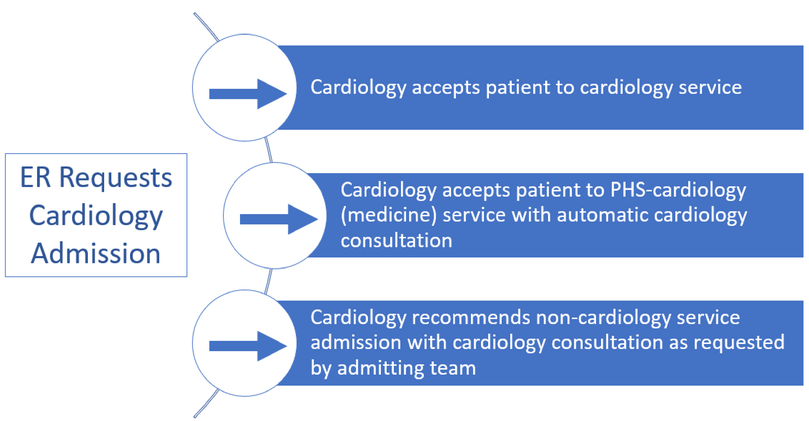


Quality and Procedural Metrics After Intervention

Metrics	Baseline	Target	Current	Comment
Length of Stay	4.9+/-5.2	4.9+/-5.2	5.0+/-5.4	No change in length of stay
In-hospital Mortality	2.4%	2.4%	1.6%	Trend towards improvement
Charges Observed	$ 89,884.24	$89,884.24	$89,091.30	No change in charges
Post-procedure complications (bleeding, stroke)	2.8%	2.8%	2.4%	Stability or improvement

Distribution of Cardiac Procedures

Figure 1: New Service Workflow



Conclusions

- Successful new service integration with review and buy-in from primary stakeholder leadership
- Low-risk cardiology patients appear to be appropriately transferred to new service based on cardiac diagnoses and procedures
- Hospitalist-based care of cardiology patients with cardiology consultation appears non-inferior based on quality and patient safety metrics
- ICD code based utilization have limitations including being observational in nature
- Downstream impact on primary and consultative teams were continue to need to be refined
- Proportion of time services were capped was not able to be assessed
- Future studies should be prospective in nature and consider impact on resident education