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Same Day PCI Discharge

St. Vincent Heart Center Indianapolis, Indiana

Background

It is estimated over one million PCIs are performed per year in the United States however only 6.5% of elective PCIs are actually discharged the same day leading to increased costs as length of stay is longer. Meta-analysis from RCT and observational trials comparing same-day discharge and overnight hospitalizations after uncomplicated PCI found most complications occurred 4-6 hours after intervention. Safe single day discharge (SDD) after outpatient PCIs have been shown to reduce cost and improve economic outcome, saving \$200-500 million a year. This single center study created a target of 30% for SDD to improve costs.

Methods

An algorithm was developed and followed for all elective PCI cases that were completed by 1600. Steps within the algorithm included low-risk clinical criteria, favorable angiographic criteria, optimal sociodemographic criteria to determine eligibility for same day discharge. Mean length of procedure was then determined from first procedure to discharge over the course of 2 years. Over the course of 2 years, savings were then calculated.

1. JACC: Cardiovascular Intervention Vol. 6, NO 2, 2013

6. JACC: Cardiovascular Interventions, Volume 10, Issue 4, 27 February 2017: 352-354

Figure 1

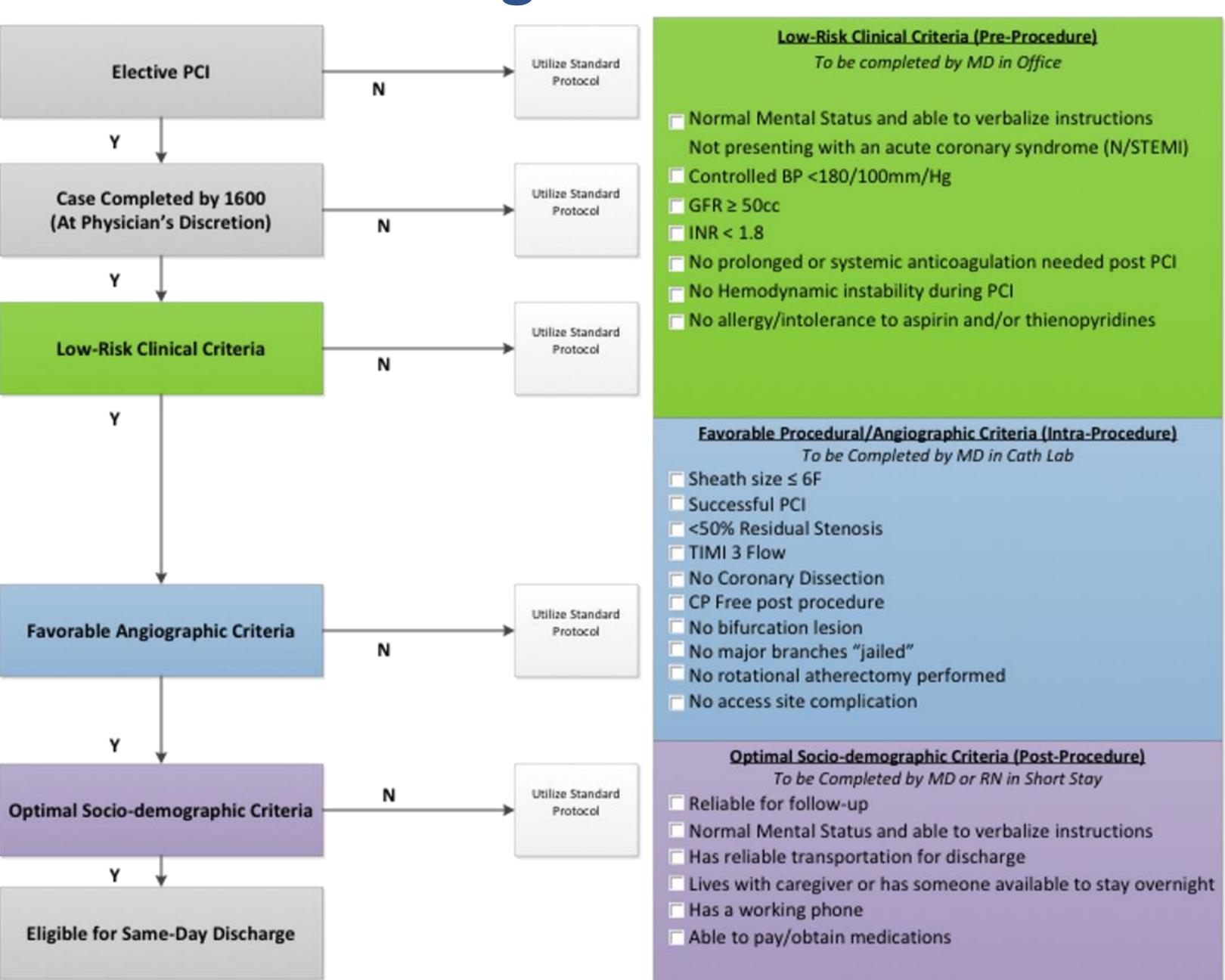
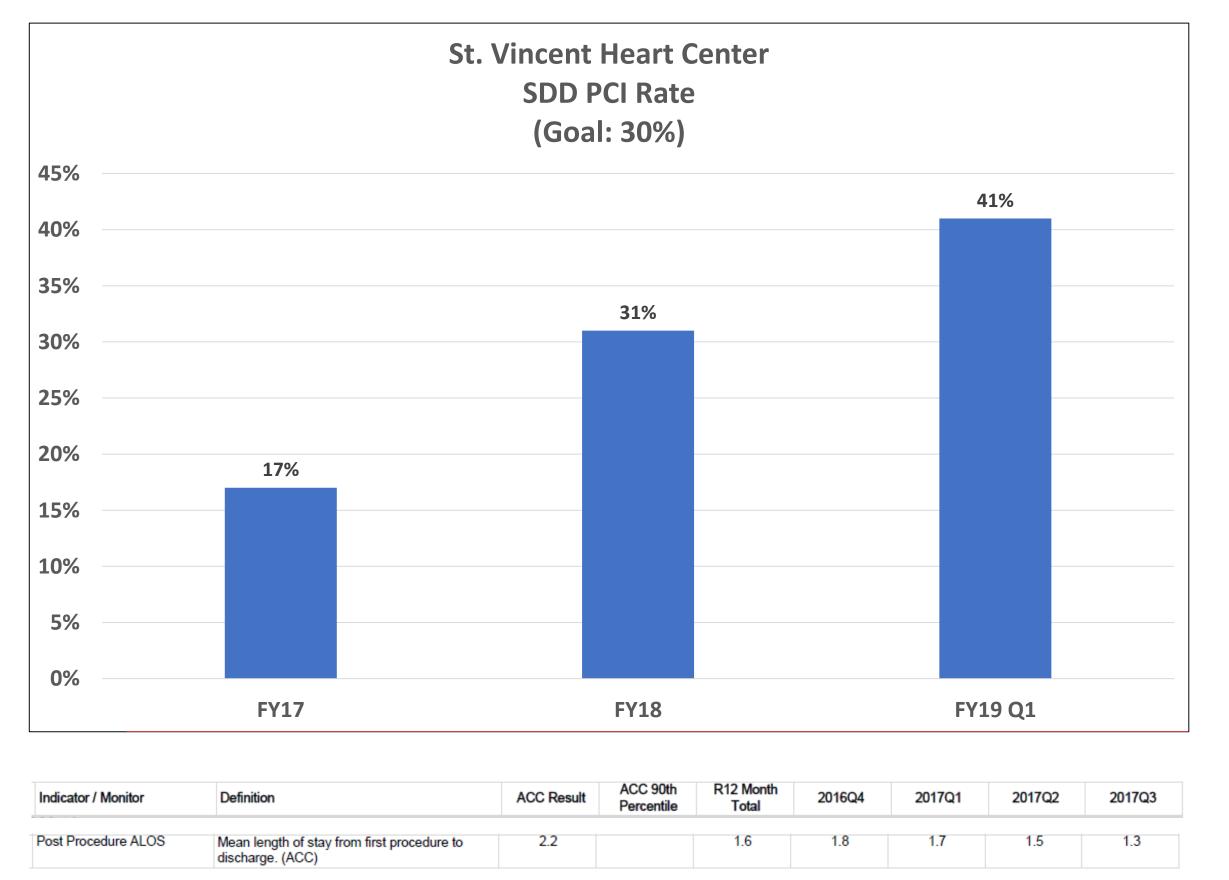


Figure 2



Results

The algorithm identified low risk patients after an elective PCI that were appropriate for same day discharge. In the initial year, the rate was 13% of elective PCIs. Over the next 2 years, the rate improved to 25% and 32%. The total savings was estimated \$3,533,192 by opening beds, and preventing hospital complications.

Clinical Implications

Utilizing an algorithm to determine the safest situation for SDD after elective PCI, an increase in SDD is observed with significant cost savings.

Conclusion

This study will enable cardiovascular clinicians to appropriately assess patients who are appropriate for same day discharge to improve patient outcomes, patient satisfaction, and save money.

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Disclosures

The primary author and co-authors have no disclosures.