

# Reducing Readmission Rates by Providing a Comprehensive Transition Plan from Hospital to Home for Cardiac Surgery Patients

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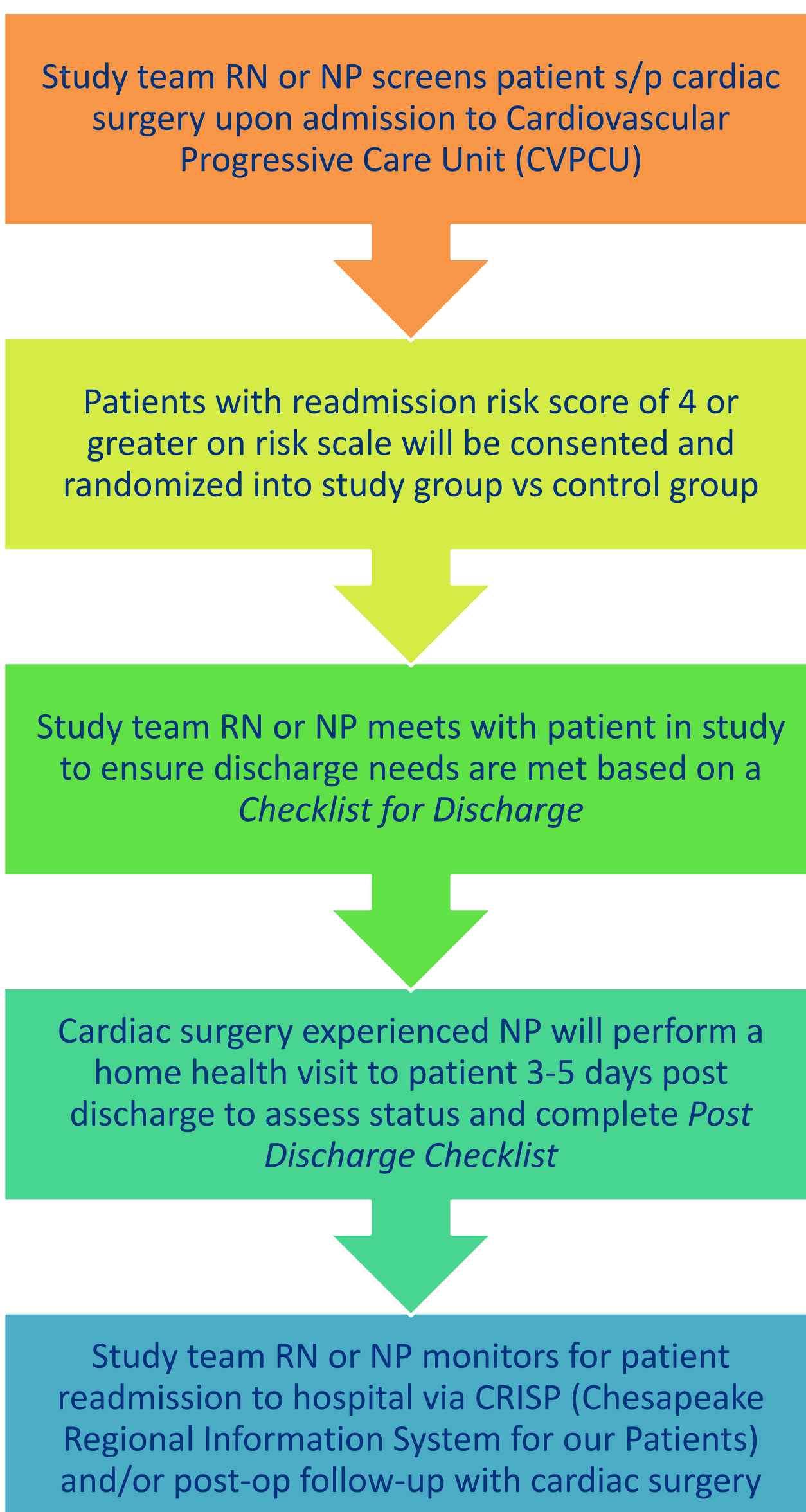
## 1 Background

Studies nationwide have shown that patient readmissions to the hospital after cardiac surgery can be as high as 21%<sup>1,2,3,4</sup>, which results in increases in health care expenditures and decreases patient satisfaction.

## 2 Objective

This study aims to reduce 30 day readmission rates for post-operative cardiac surgery patients that are identified at risk for readmission by using a Readmission Risk Screening Tool and having a Risk Screening score greater than or equal to 4.

## 3 Methods



### Inclusion Criteria:

- ≥ 18 years old
- Admitted directly to the CVPCU after cardiac surgery
- Cardiac surgery procedures: coronary artery bypass graft (CABG), valve replacement, aortic aneurysm repair, and combined CABG and valve procedures.
- Resides in the state of Maryland
- Able to provide informed consent
- Readmission Risk Screening Tool score ≥ 4

## Readmission Risk Screening Tool

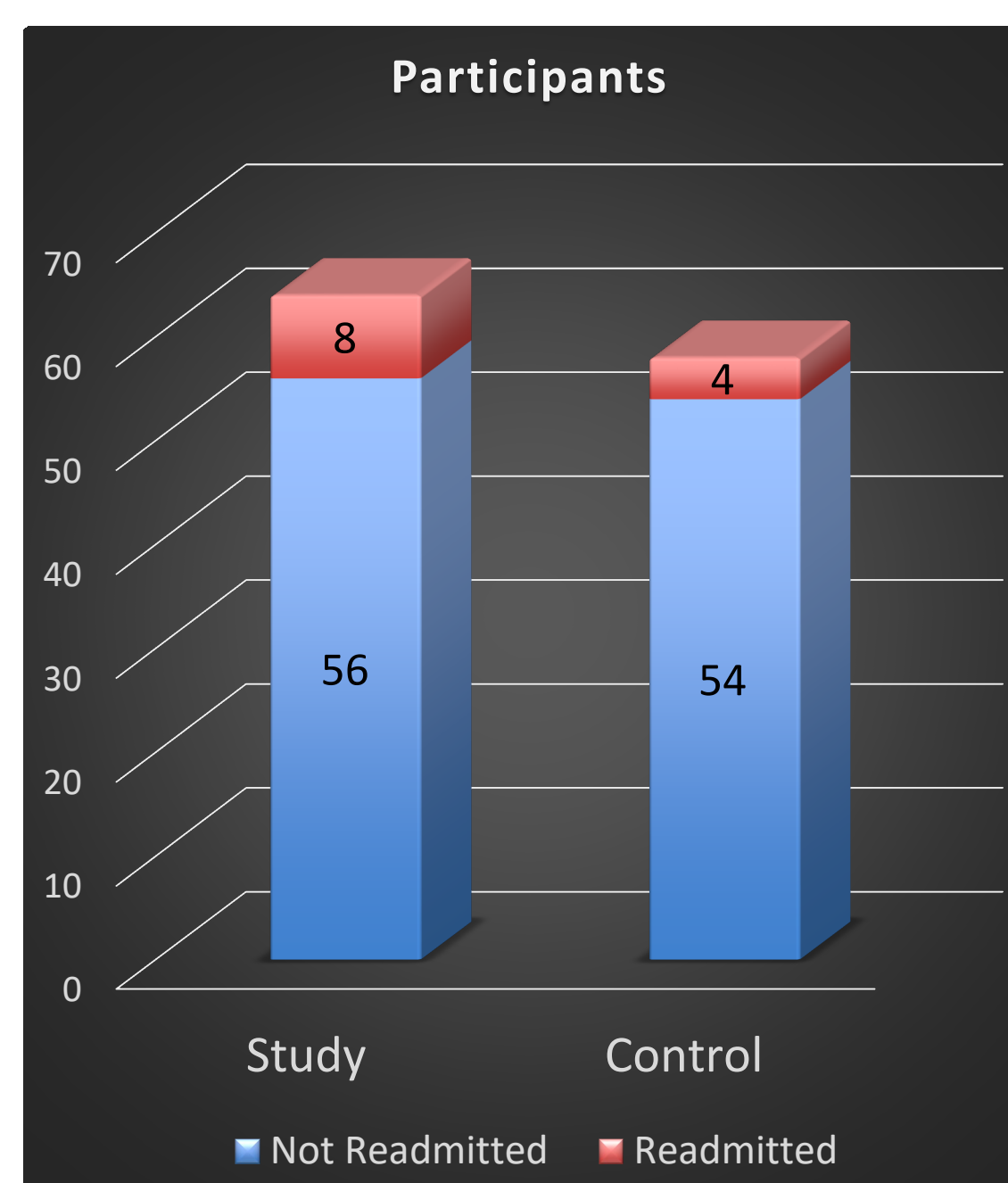
Risk Factor	Points Assigned
Diabetes	2
Chronic Lung Disease	2
EF ≤ 30%	3
Endocarditis	3
Public Health Insurance	2
Combined CAB + Valve Procedure	3
Non-STS Index Procedure	2
Discharge on Coumadin	2
Discharge hemoglobin < 8	2
Maximum Possible Score:	21

## 4 Results

Number of patients screened with the Readmission Risk Screening Tool = 794 (between July 2016 – June 2017)

Current number of participants = 122 (as of June 2017)

- Study = 64
- Control = 58

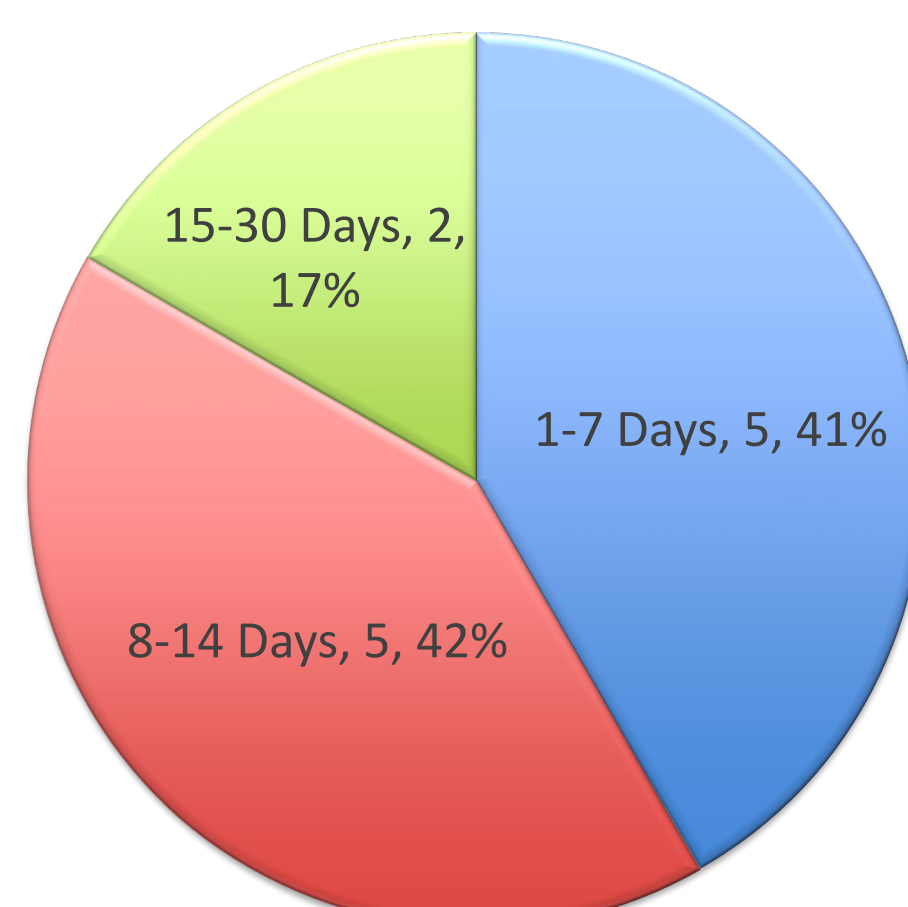


Average risk score for participants = 5.04

Average time of home visit = 50.96 min

Average days from DC to readmit = 9

### Days from DC to Readmission



## 5 Conclusions

As of mid-June 2017, there have been 122 patients consented into the study. Using the CRISP database, 12 were readmitted.

- 41% of readmissions occurred between 1-7 days after DC
- 42% of readmissions occurred between 8-14 days after DC
- 17 % of readmissions occurred between 15-30 days after DC

It should be noted that during NP home visits, the visiting NP determined that 3 patients required hospitalization and were directly readmitted as a result.

Interventions aimed at monitoring critical patients within the first 14 days after DC may be important in preventing the readmission of cardiac surgery patients.

## 6 Future Directions

This study is on-going. Data collection will continue until at least 400 participants have been consented and randomized as a study and control participant.

Conclusions will be finalized at the completion of the study.

## 7 References

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