

AIM Statement: By September 2023, for patients with uncomplicated STEMI following successful PCI, reduce the length-of-stay by 50%, from 3-4 days to 1-2 days.

PROBLEM DEFINITION

Currently, many patients with uncomplicated STEMI are staying in the hospital for periods than necessary. We have identified several barriers to early discharge and have been working to overcome them in hopes of increasing the rate of patients with early discharge.

ROOT CAUSE ANALYSIS

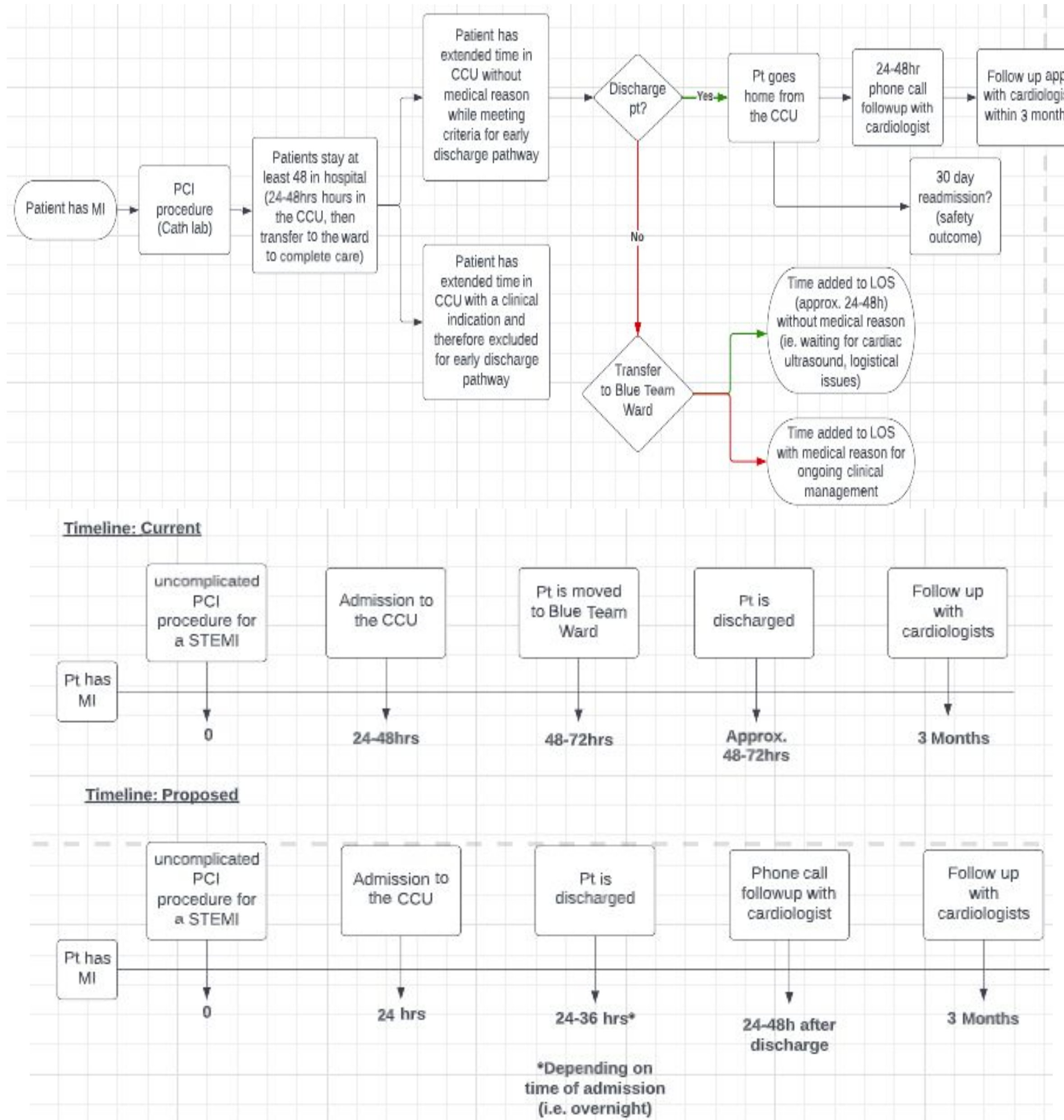


Figure 1: Current Process Diagram with Proposed Changes

There are 2 benefits to this process:

1. Optimization of healthcare resources through reduction in non-value added time in CCU
2. Improved patient experience through reduced LOS

Early Discharge After STEMI

Eligibility Criteria

- Successful primary PCI (TIMI flow grade 3)
- Absence of disease deemed for inpatient staged PCI or CABG
- LV gram or TTE with LVEF $\geq 40\%$ and the absence of thrombus
- No recurrence of ischemic symptoms
- Absence of heart failure
- No significant arrhythmias (NSVT, VT, VF, high-grade AV block)
- No hemodynamic instability (no inotropes or mechanical support)
- Ambulating independently
- No other active medical issues requiring inpatient management (e.g. uncontrolled Htn, new/uncontrolled DM, AKI, bleeding)
- Suitable social circumstances

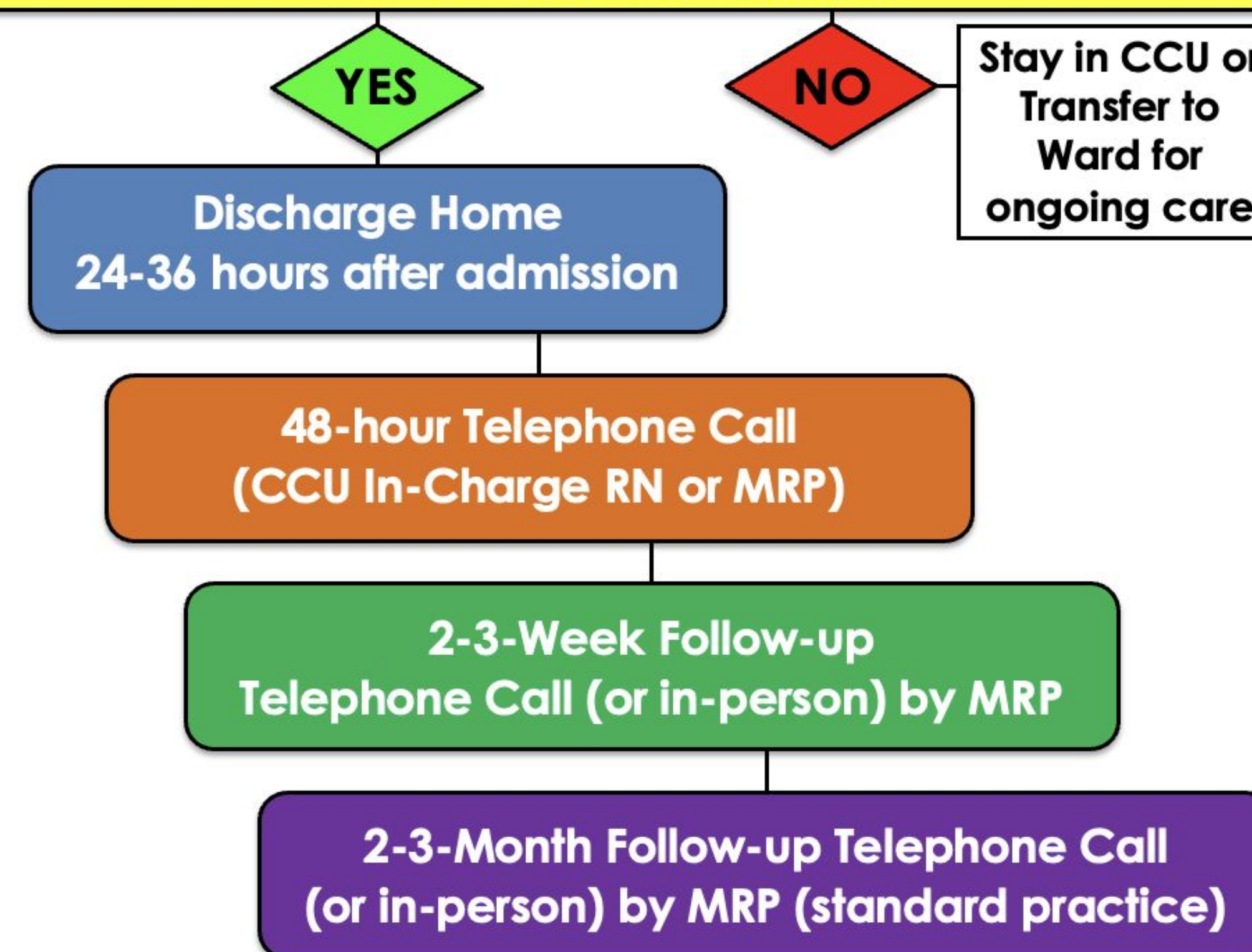


Figure 2: Early Discharge Pathway Following STEMI (graphic posted in hospital)

CAUSE AND EFFECT DIAGRAM: BARRIER IDENTIFICATION

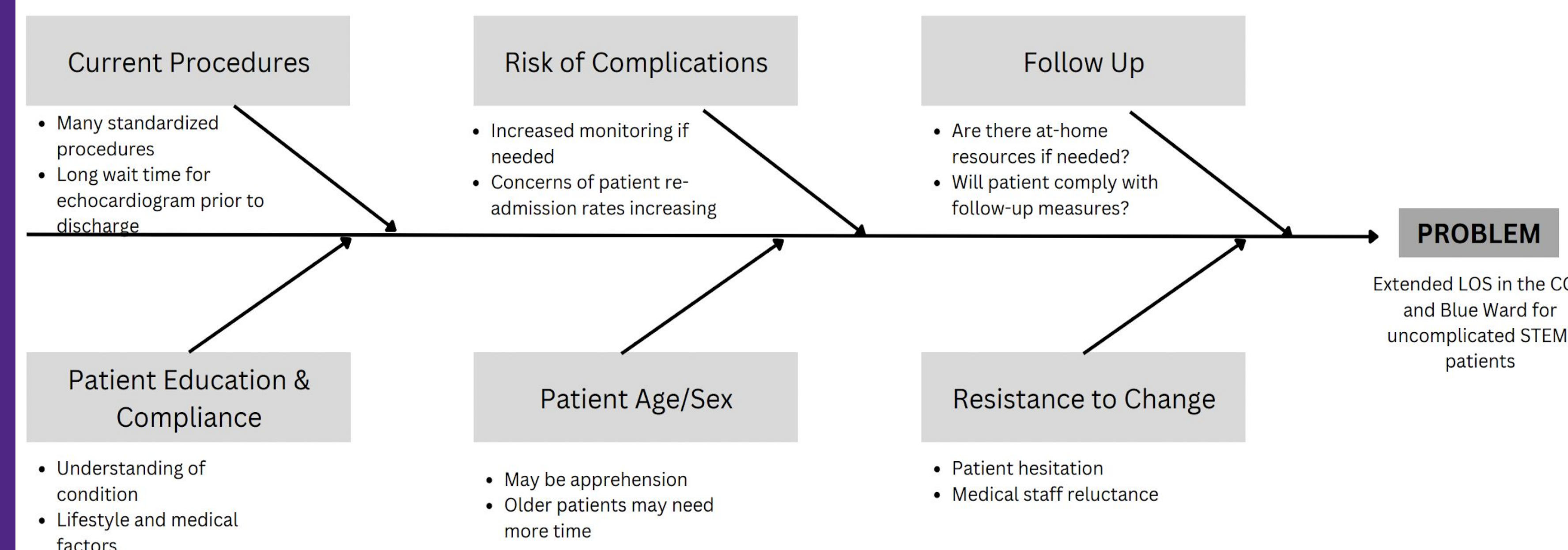
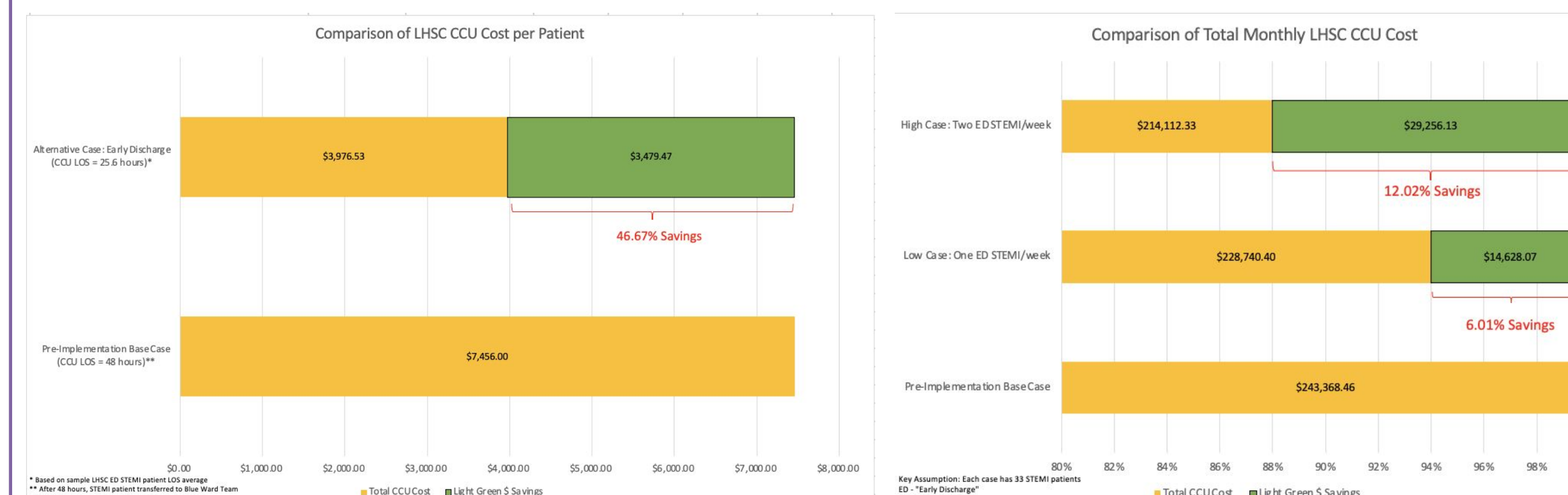
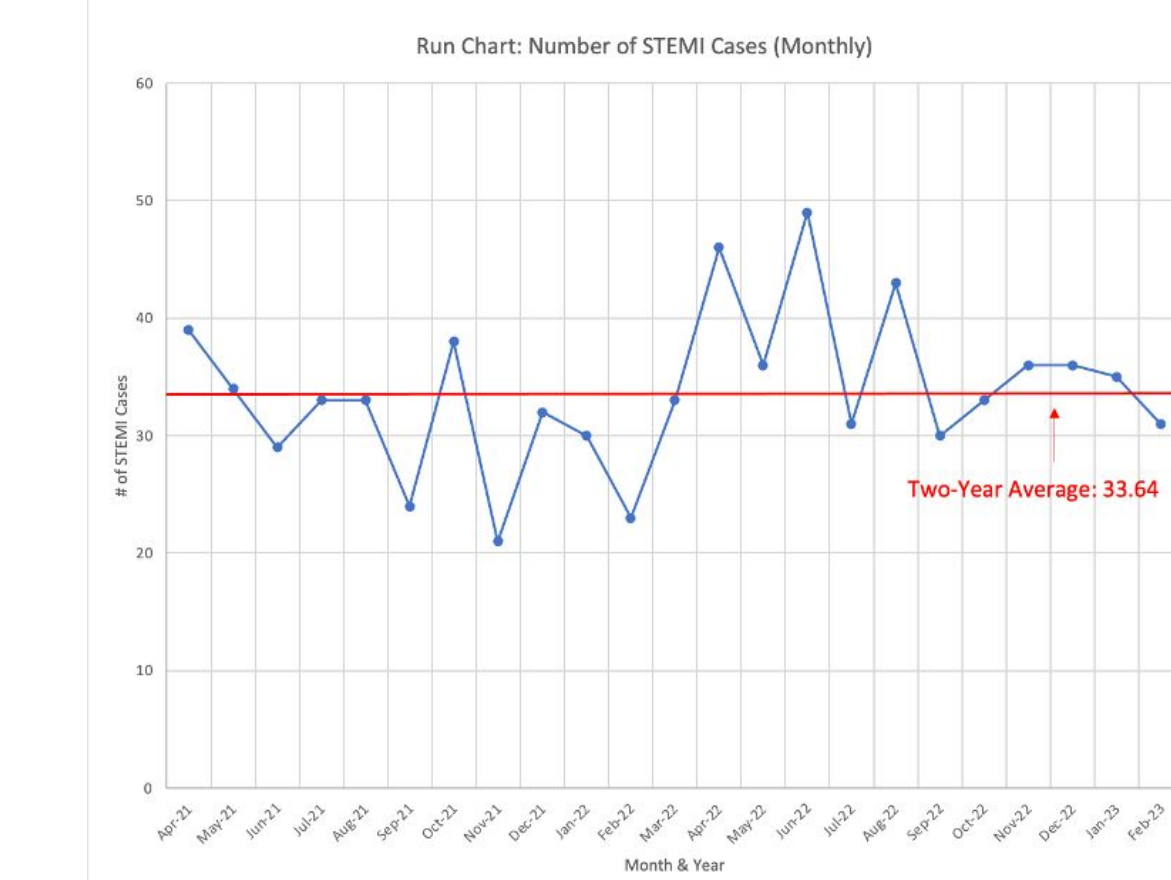


Figure 3: Fishbone Cause & Effect Diagram to Identify Barriers

IMPLEMENTATION

The PDSA cycle tested implementation of the proposed pathway and the impact of a reserved echocardiogram. Preliminary data indicated nearly 40% of physicians have embraced the new pathway over the first 3 months of implementation, and that 1-2 patients per week meet the inclusion criteria. Some challenges identified include physician resistance to change in practice, and limited data due to low patient volume. An additional PDSA cycle will be completed to further refine the process and address the above challenges once sufficient data is collected.

MEASUREMENT & RESULTS



SUSTAINABILITY

1. Supporting change in physician practices must be furthered over time
2. New standard optimizes patient care and enhances patient experience
3. Days in CCU will be measured by residents