

Accelerated Discharge Process for Patients with Non-ST Elevation Acute Coronary Syndromes

Following Percutaneous Coronary Intervention

Sarah E. Slone

Johns Hopkins University

Author Note

“On my honor, I have neither given nor received unauthorized assistance on this written assignment.”

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## **ABSTRACT:**

**Background:** Historically, non-ST elevation acute coronary syndrome (NSTE-ACS) patients have been monitored as inpatients following successful percutaneous coronary intervention (PCI), but accumulating evidence demonstrate that accelerated discharge is safe, reduces cost, and enhances patient satisfaction. This quality improvement project examined the impact of implementing a post-PCI streamlined discharge process for low risk NSTE-ACS patients on length of stay (LOS), provider utilization, and major adverse cardiovascular events (MACE).

**Methods:** Clinical characteristics and timing of admission, PCI, and discharge data were collected prospectively from patients presenting to the cath lab for intervention for NSTE-ACS during 90-day historical control and implementation periods. Interventional cardiologists and inpatient clinicians were provided training on identifying low risk patients and discharge criteria following PCI for NSTE-ACS. One-on-one peer coaching was provided throughout the implementation period to reinforce awareness and increase utilization of accelerated discharge criteria.

**Results:** Patient characteristics were similar between the historical and implementation periods. Although total hospital LOS did not decrease in the low risk group (50:54±24:03 vs 41:43±17:57;  $P=0.14$ ), there was a statistically significant reduction in LOS after PCI (22:28±5:52 vs 17:29±8:25;  $P=0.003$ ). Complication and readmission rates were unchanged by accelerated discharge. Provider utilization of the discharge protocol increased fourfold during the implementation period (8% vs 32%;  $P=0.02$ ).

**Conclusions:** Implementation of an accelerated discharge protocol for patients following PCI for NSTE-ACS leads to a reduction in post PCI LOS without an increase in readmissions or

complications. Increased utilization of the protocol throughout the implementation period may be attributed to one-on-one peer coaching.