

# Acute Myocardial Infarction Quality Improvement Project: Using QI Methodology to Reduce Hospital Standardized Mortality

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**AIM Statement:** By December 2025, for index cases of Acute Myocardial Infarction admitted to LSHC, we will reduce the Hospital Standardized Mortality Ratio by 10%.

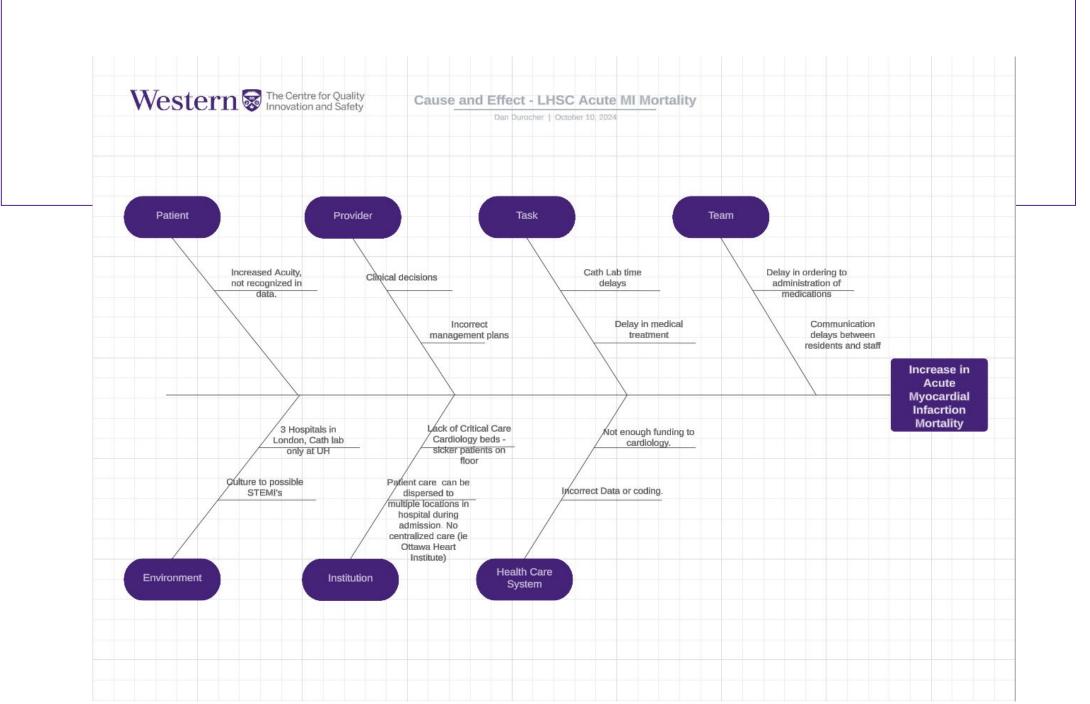
### PROBLEM DEFINITION

LHSC HSMR (Hospital- Standardized-Mortality - Ratio) for Acute Myocardial Infarctions is significantly elevated compared to other institutions of similar capacity.

## ROOT CAUSE ANALYSIS

Root cause analysis two potential reasons:

- 1) There is a data issue.
- Chart Audit revealed -> 10% Discrepancies in Charlson Comorbidity Index Score
- 2) There is a clinical reasons.
- Victoria Acute MI HSMR was astronomically high compared to UH (despite only accounting for a minority of MI cases). Audited STEMI Data 2020-2022 -> 6/30 STEMI deaths were from Victoria Hospital had delayed Door-2-Balloon Time (D2BT) from Victoria exceeded recommendations
- Many regional centres STEMI transfers times had elevated (D2BT) or thrombolysis when within PCI transfer time

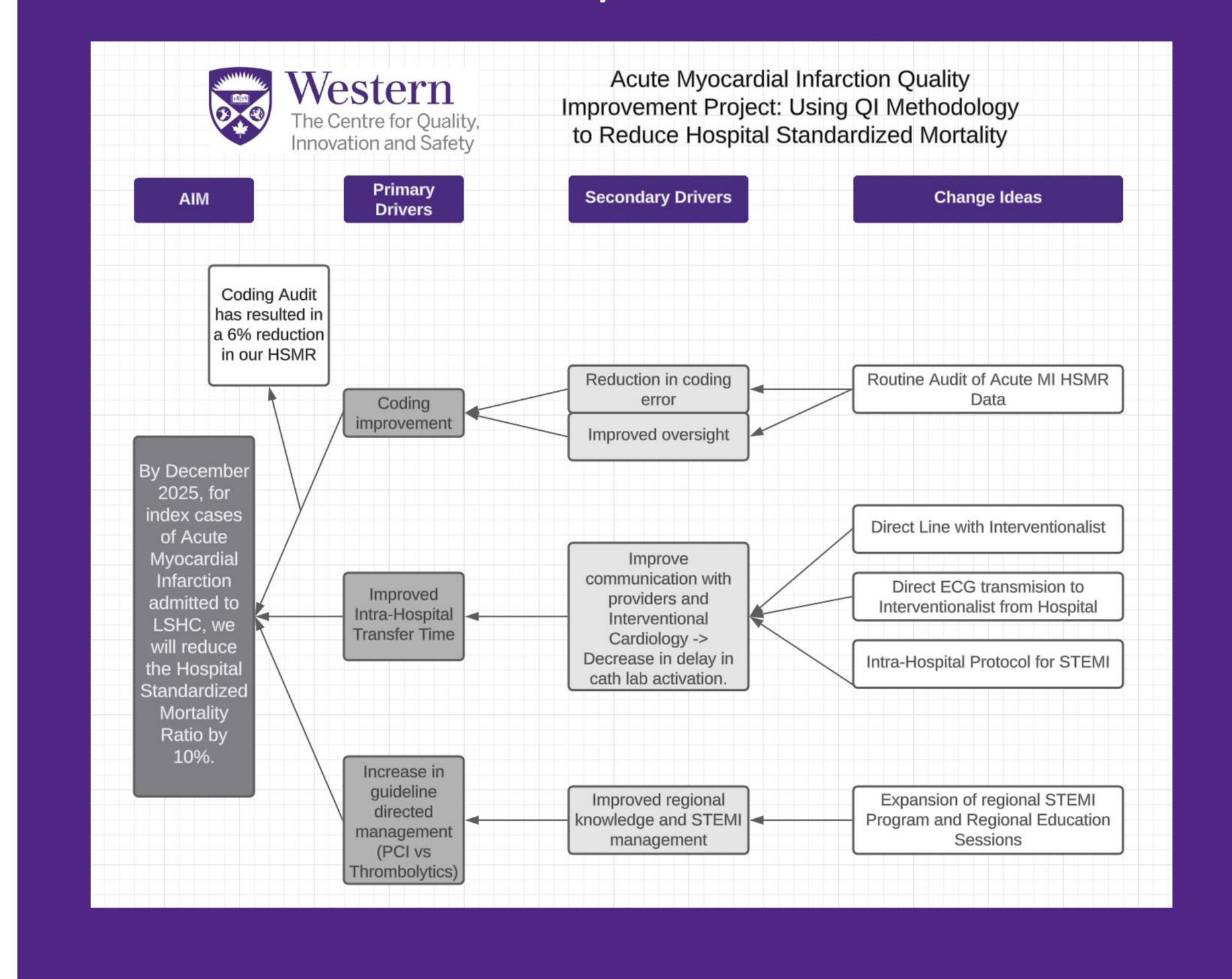


The Increase in Acute Myocardial Infarction Hospital Standardized Mortality at LHSC is Multifactorial.

Clinical and Coding Issues are driving this. We have/are implementing a 3-pronged approach to reduce the HSMR including coding auditing, an Intra-Hospital STEMI Protocol, and Expansion of our regional STEMI Program. With coding auditing alone we have reduced the Hospital Standardized

Mortality Ratio

By 6%



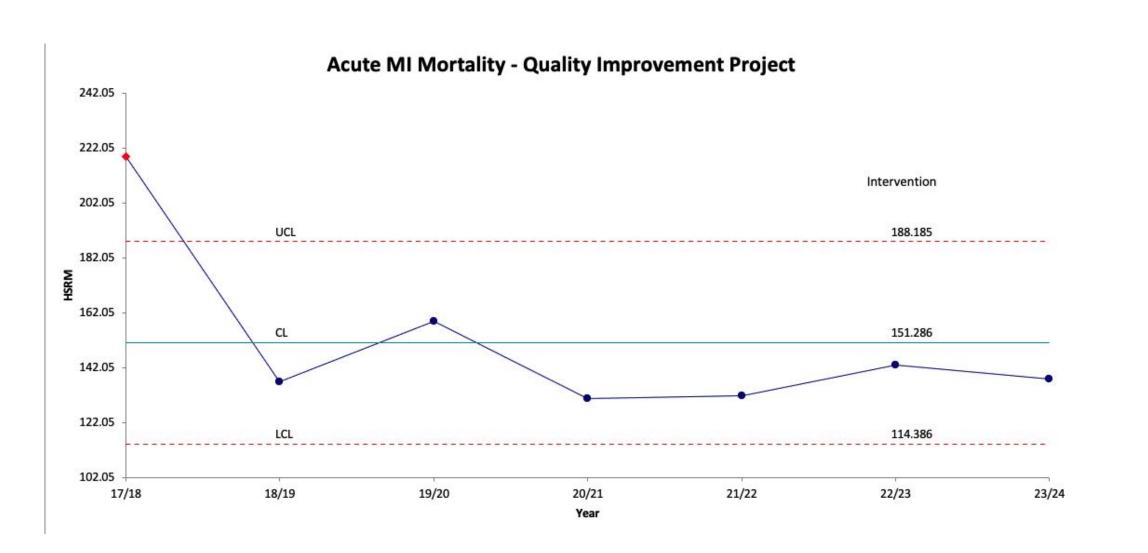
#### IMPLEMENTATION

1) Coding Audit:

The audit of acute MI mortality data resulted in a 6% reduction in HSMR.

- 2) Intra-Hospital STEMI Protocol: In process of launching.
- 3) Expansion of our Regional STEMI Program and Regional Education:
- Working with regional partners for onboarding of various regional centres

### MEASUREMENT & RESULTS



#### SUSTAINABILITY

- 1. Ongoing Data Audits -> Plan For Automation
- 2. Protocolled Intra-Hospital STEMI Protocol and Regional Expansion of STEMI Program
- 3. Continued monitoring for HSMR