

# MISSION: LIFELINE

Prepared by:



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## Referral Center Interpretation Manual

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## INTRODUCTION AND DEFINITIONS

This manual is intended to be used as a reference tool to assist in the interpretation of the Mission: Lifeline Referral Center Report. The sections described in this manual are:

- Adherence and Performance Composite Scores (page 1 of report)
- Benchmarks
- Risk Adjusted Mortality (page 10 of report)
- Missing Data Values

There are several important definitions that apply throughout the Mission: Lifeline Referral Center Report and Glossary.

**EMS:** Emergency Medical Service. Refers only to patients transported to the hospital via ambulance. Other 3<sup>rd</sup>-party modes of transport (Mobile ICU, Air) are included in specific report line items only where noted.

**POV:** Personally Operated Vehicle. Refers to patients who transport themselves to the hospital, or who are transported to the hospital by a family member or friend.

**FMC:** First Medical Contact. In the context of the report, this term is applicable **ONLY** when a patient is seen by medical personnel prior to hospital arrival.

**NOTE:** In order to receive a site-specific report, referral centers must have submitted at least 1 STEMI records within the 12-month period displayed in the report. Sites not submitting any records will receive a report displaying only national data.

## INDIVIDUAL ADHERENCE AND PERFORMANCE COMPOSITE SCORES

The Mission: Lifeline Referral Center Report describes your site's quarterly performance on five (5) acute guideline metrics (use of guideline suggested therapies and procedures within the first 24 hours) and five (5) discharge guideline metrics (use or prescription of guideline suggested therapies prior to hospital discharge). These metrics are based on the ACC/AHA Performance Measures for Adults with ST-Elevation (STEMI) and Non-ST-Elevation Myocardial Infarction (NSTEMI). The Mission: Lifeline Referral Center Report Glossary provides specific definitions and inclusion/exclusion criteria for each of these metrics. Where applicable, these metrics match the ACTION Registry-GWTG measure definitions. The guideline metrics are listed below:

### *Acute*

- ECG within 10 minutes of Arrival
- Reperfusion Therapy
- Arrival to Thrombolytic  $\leq$  30 Minutes
- Arrival to Transfer Out to PCI Center  $\leq$  45 Minutes
- Aspirin at Arrival

### *Discharge*

- Aspirin at Discharge
- Beta Blocker at Discharge
- Statin at Discharge
- ACE inhibitor/ARB at Discharge in LVSD
- Adult Smoking Cessation Advice

Using data submitted in the previous quarter, these metrics are reported to you in the **Executive Summary** of the report as separate line items and as a "Performance Composite Score" that present a global view of your hospital's performance. The Mission: Lifeline composite score is comprised of the ten (10) individual medication, procedure, and/or secondary prevention guideline metrics.

- **Overall Mission Lifeline Composite:** Overall adherence on ten STEMI acute and discharge guideline metrics

This score, as well as individual metric adherence, is presented as a dashboard with the hospital's performance compared to that of other participating sites, using the following parameters:

- **Care Opportunities (the denominator) (N):** The total number of treatment opportunities among all eligible patients. Each metric for which a patient is eligible is considered a "care opportunity." Therefore, each patient contributes up to 10 care opportunities.
- **Adherence Score ("Correct Care"):** The ratio of total received therapies for all patients at a single site out of the total number of opportunities for all patients at that site.
- **State Adherence Score:** The ratio of total received therapies in the previous quarter for all patients in referral centers in your state, out of the total number of opportunities for all patients in that state. Note that this benchmark is provided only for states in which six or more referral

centers submitted data for the reporting period. In states where fewer than six centers submitted data, each hospital must agree to have their data included in a state aggregate in order to present this benchmark. If your hospital is located in such a state, and you are interested in agreeing to inclusion in your state benchmark, please contact your AHA QII representative.

- **Nation Adherence Score:** The ratio of total received therapies in the previous quarter for all patients in referral centers in the nation, out of the total number of opportunities for all patients in the nation.

The Mission: Lifeline Composite score is accompanied by a distribution graph depicting your hospital’s performance compared with other ACTION Registry-GWTG Referral Center hospitals. The graph displays the minimum and maximum values reported for the measure, as well as the 25<sup>th</sup> and 75<sup>th</sup> percentiles. An arrow indicates where your hospital performance falls in the continuum of scores.

**Performance Composite and Example Calculations**

Caregivers have up to ten “opportunities” to provide care for each patient as specified by the performance measures (based upon the acute and discharge guideline metrics noted above). Some patients will not be eligible for all ten guideline metrics due to specific medication or procedure contraindication(s), death prior to hospital discharge, or transfer to another facility.

In the example below, we illustrate how the performance composite score is calculated.

- **Performance composite** scores are calculated as the sum of a hospital’s “correct” provided care (i.e., consistent with the performance measures) out of the total number of care “opportunities” encountered by the hospital in treating its STEMI patients.

**Performance Composite Example Calculation**

Patient XXX		
Guideline Metrics	Patient Eligible?	Therapy Received?
<b>Acute Therapies</b>		
ECG within 10 Minutes of Arrival	Yes	No – received in 15 minutes
Reperfusion Therapy	Yes	Yes – lytics received
Arrival to Fibrinolytic ≤ 30 Minutes	Yes – lytics received	No – received in 40 minutes
Arrival to Transfer to PCI Center ≤ 45 Minutes	No	n/a
Aspirin at Arrival	Yes	Yes
<b>Discharge Therapies</b>		
Aspirin at Discharge	Yes	Yes
Beta-blocker at Discharge	No	n/a
Statin at Discharge	Yes	Yes
ACE-I or ARB at Discharge in LVSD	Yes	No
Adult Smoking Cessation Advice	No-non-smoker	n/a

Eligible Admissions: 1  
 Total Opportunities: 7  
 Total Times “Correct Care” Administered: 4  
 Overall Performance Composite: 57% (4/7)

## BENCHMARKS

In order to help you to evaluate your site's treatment of STEMI patients, the Mission: Lifeline reports provide several benchmarks. The first and most important benchmark is your site's performance over time. Assuming your system of data collection remains constant, this benchmark enables you to best judge the success of your quality improvement initiatives.

Additionally, we encourage you to compare your hospital results against two external benchmarks provided within the Mission: Lifeline reports, as detailed in the table below. When making comparisons to these external points of reference, it is important to recognize certain caveats.

- First, external benchmarks tend to exhibit less variability over time than your site's results due to their larger sample size.
- Second, we believe that ACTION Registry-GWTG participants generally report accurate information. However, sites may vary in the degree to which they are able to identify certain events – a function of both data collection mechanisms at hospitals and patient record-keeping. To help to ensure the validity of the data, we reiterate the importance of careful and consistent application of the variable definitions provided to you.

### External Benchmarks

<b>State:</b>	All data reported by Referral Centers in your state within the previous 12 months. This benchmark is provided in states with at least six ACTION Registry-GWTG sites submitting data during the reporting period.
<b>Nation:</b>	All data reported by all Referral Centers during the previous 12 months.

## MISSING VALUES

In general, missing data is assumed to be “no” in the feedback report calculations. However, missing data will be included in the **denominator** for performance rates, so a large amount of missing data may have an adverse effect on your site’s performance metrics. For example:

**10** STEMI patients are entered for Quarter 1, 2010.  
All **10** of these patients are eligible to receive acute aspirin.

- 2** of these patients are not given acute aspirin and have acute aspirin = No on DCF
- 8** of these patients are given acute aspirin.
  - **5** of these patients have acute aspirin = Yes on DCF
  - **3** of these patients have no value entered for whether acute aspirin was given

Your performance score for acute aspirin would be reported as:

**5 administered/10 eligible = 50% performance**

Your actual performance, had the 3 missing fields been completed would be:

**8 administered/10 eligible = 80% performance**

### **What is the difference between a hyphen (-) and a 0% on the report?**

A hyphen (-) indicates that no patients were included in the eligible population for that particular line item.

A 0% means that patients were eligible, but that no patients met the criteria for that line item.