



Mission: Lifeline Recognition

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Mission:Lifeline™ Launched 2007

- ➔ Mission: Lifeline™ is a national community-based multidisciplinary initiative
- ➔ **Overarching Goal**→ Improve the mortality and morbidity and quality of care for the AMI population, specifically through the development of STEMI systems of care
- ➔ Guiding principle:
Patient centric, addressing the continuum of care for STEMI patients from symptom onset into the point of entry into the healthcare system, touching each aspect of the system, and return the patient back to the local community and physician



Mission: Lifeline Involvement

Certification

Examples



Recognition

Examples



Participation

Participation, Recognition,
& Certification criteria available:
www.americanheart.com/missionlifeline

Mission: Lifeline Hospital Steps For Recognition

➔ **STEP 1: Sign contract with ACTION Registry - GWTG**

ACTION Registry-GWTG™



NCDR® ACTION Registry® - GWTG™ v2.1 (Limited)
Acute Coronary Treatment and Intervention Outcomes Network Registry

ACTION Registry-GWTG™

NCDR® ACTION Registry® - GWTG™ v2.1
Acute Coronary Treatment and Intervention Outcomes Network Registry

➔ **STEP 2: Meet the benchmarks for all of the Mission: Lifeline Performance Measures for a given period of time:**

- 90 days/ 3 months for BRONZE
- 12 months for SILVER
- 24 months for GOLD

Mission: Lifeline Recommendations for Recognition for STEMI Systems of Care

There are three levels of involvement with Mission: Lifeline: Participation, Recognition and Certification. For every program, all system components (EMS, Non-PCI/STEMI Referral Centers and PCI/STEMI Receiving Centers) requirements must be met in order for the system to qualify for each level of involvement.

The Mission: Lifeline Recognition Program will acknowledge STEMI Systems, EMS, Non-PCI/STEMI Referral Centers and PCI/STEMI Receiving Centers for their efforts to improve quality of care for STEMI patients. This is the second level of involvement. Systems and their components should participate in the approved Mission: Lifeline national registry program, ACTION Registry-GWTG. All achievement measures will be considered in the composite score. All reporting measures will be reviewed and collected but will not be used in the composite score. It should be noted that at this time, only data from STEMI Referral and STEMI Receiving Center Programs can be submitted.

Criteria:

- 85% or greater composite score with no single measure below 75% on the following achievement measures for specified periods of time
- Bronze = 90 consecutive days, Silver = 12 consecutive months, Gold = 24 or more consecutive months
- Annual award period for consideration = January – December
- Annual award submission period = January 1st – March 31st following year

EMS

Achievement Measures:

1. Percentage of patients with non-traumatic chest pain > 35 years treated by EMS for whom pre-hospital 12-lead electrocardiograms were obtained
2. Percentage of STEMI patients with first pre-hospital medical contact to balloon inflation (first device used) time within 90 minutes (within 30 minutes for administration of fibrinolytic therapy)

Reporting Measures:

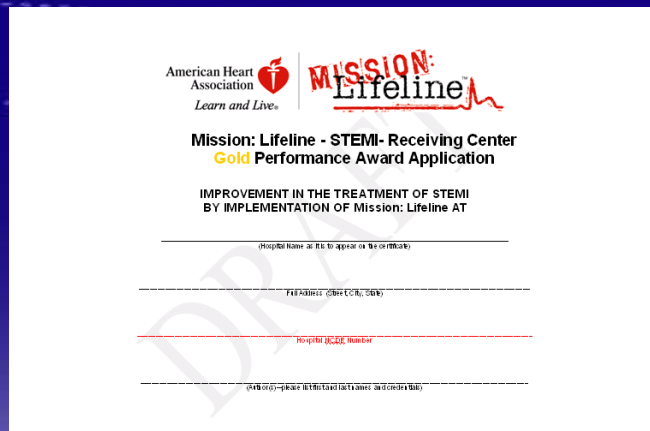
Mission: Lifeline Hospital Steps For Recognition

- ➔ **STEP 3:** Check to see if your performance measures meet at least 75% or above per measure AND 85% or above for the composite score for all measures.
- ➔ **STEP 4:** For 2010, the application period begins January 1, 2011 and ends on March 31, 2011. Applications will be available on the Mission: Lifeline website and consists of a checklist of the hospital's ARG performance percentages.

Mission: Lifeline Hospital Steps For Recognition

➔ STEP 5: After the hospital submits the electronic application, the application will be reviewed, verified and approved by the AHA.

- The forms that will be reviewed will be a hospital permission form and an application of measures for either a STEMI Referral or STEMI-Receiving Center. The 2 page application should only take about 30 minutes to complete.




results: Implementation of ACTION Registry - GWTG showed treatment rates of pre-and post- intervention as indicated by the results in the charts below.

You must provide the numerator (N) and denominator (D) as well as percentage for the following items. The percentage must be at a 85% or greater composite score (may be rounded up to the first decimal (84.6%) with no single measure below 75% for 24 consecutive months.

Achievement Measures- STEMI Receiving Center	Performance Measure Percent (N/D) (%)
Percentage of STEMI patients with a door-to-balloon (first device used) within 90 minutes, non-transfer	
Percentage of STEMI patients with first medical contact to balloon inflation (first device used) within 90 minutes, non-transfer	
Percentage of reperfusion –eligible patients receiving any reperfusion (PCI or fibrinolysis) therapy	
Percentage of STEMI patients receiving aspirin within 24 hours	
Percentage of STEMI patients on aspirin at discharge	
Percentage of STEMI patients on Beta Blocker at discharge	
Percentage of STEMI patients with LDL >100 who receive statins or lipid lowering drugs	
Percentage of STEMI patients with LVSD on ACEI/ARB at discharge	
Percentage of STEMI patients that smoke with smoking cessation counseling at discharge	
Composite Score (Performance Measure Average) : _____	

Composite and Defect Free Measures: Indicates a hospital's performance over all patients for selected elements of care. The composite performance is the mean % of eligible measures received by each patient. This average is calculated by summing the number of times patients received selected interventions and dividing that by the total number of interventions for which these patients were eligible.

Mission: Lifeline Hospital Steps For Recognition

 **STEP 6:** All recognized hospitals will be notified by their local Mission: Lifeline and/or GWTG representatives around May 2010.



Mission: Lifeline Recognition

- ➔ Is the second level of involvement an organization can achieve within Mission: Lifeline
- ➔ Like participation and certification, the program is divided into 4 areas:
 - EMS
 - STEMI Referral Hospitals (Non-PCI Capable Hospital)
 - STEMI-Receiving Hospitals (PCI Capable Hospital)
 - STEMI Systems

Mission: Lifeline Recognition

Timeframes:

- ➔ Referral (Non-PCI) and Receiving (PCI) Center Recognition Programs will be available for launch in October 2009.
- ➔ EMS Program is estimated to be available in 12-18 months.
- ➔ Systems Program is also estimated to be available in 12-18 months.

Mission: Lifeline Recognition

All areas must achieve the following:

- ➔ 85% or greater composite score with no single measure below 75% on the following achievement measures for specified periods of time
- ➔ Bronze = 90 consecutive days,
Silver = 12 consecutive months,
Gold = 24 or more consecutive months
- ➔ Annual award period for consideration =
January - December
- ➔ Annual award submission period =
January 1st - March 31st following year

STEMI Referral/Non-PCI Center

Achievement Measures:

- 1. Percentage of STEMI patients with a door-to-first ECG time <10 minutes**
- 2. Percentage of reperfusion -eligible patients receiving any reperfusion (PCI or fibrinolysis) therapy**
- 3. Percentage of reperfusion -eligible patients with door-to-needle time within 30 minutes**

STEMI Referral/Non-PCI Center

Achievement Measures:

- 4. Percentage of reperfusion -eligible patients transferred to PCI center with door-in- to door-out time within 45 minutes**
** Facility goal to make first door-to-balloon (first device used) time within 90 minutes (including transport time)*
- 5. Percentage of STEMI patients receiving aspirin within 24 hours**
- 6. Percentage of STEMI patients on aspirin at discharge**

STEMI Referral/Non-PCI Center

Achievement Measures:

7. Percentage of STEMI patients on Beta Blocker at discharge
8. Percentage of STEMI patients with LDL > 100 who receive statins or lipid lowering drugs
9. Percentage of STEMI patients with LVSD on ACEI/ARB at discharge
10. Percentage of STEMI patients that smoke with smoking cessation counseling at discharge

STEMI Referral/Non-PCI Center

Reporting Measure:

1. STEMI Referral Center ED door-to-balloon (first device used) time within 90 minutes (including transport time)



It is recommended that a multidisciplinary STEMI team, including EMS, should review hospital specific STEMI data (both achievement & reporting measures) on an on-going basis.

STEMI-Receiving/PCI Capable Center

Achievement Measures:

1. **Percentage of STEMI patients with a door-to-balloon (first device used) within 90 minutes, non-transfer**
2. **Percentage of STEMI patients with first medical contact to balloon inflation (first device used) within 90 minutes, non-transfer**

STEMI-Receiving/PCI Capable Center

Achievement Measures:

- 3. Percentage of reperfusion -eligible patients receiving any reperfusion (PCI or fibrinolysis) therapy)**
- 4. Percentage of STEMI patients receiving aspirin within 24 hours**
- 5. Percentage of STEMI patients on aspirin at discharge**

STEMI-Receiving/PCI Capable Center

Achievement Measures:

6. Percentage of STEMI patients on Beta Blocker at discharge
7. Percentage of STEMI patients with LDL > 100 who receive statins or lipid lowering drugs
8. Percentage of STEMI patients with LVSD on ACEI/ARB at discharge
9. Percentage of STEMI patients that smoke with smoking cessation counseling at discharge

STEMI-Receiving/PCI Capable Center

Reporting Measures:

1. In-hospital mortality
2. Percentage of STEMI patients with a first medical contact to balloon inflation (first device used) within 90 minutes, transfer
3. Percentage of STEMI patients with a door-1-to-balloon (first device used) within 90 minutes, transfer
4. Percentage of STEMI patients with a door-2- to-balloon (first device used) within 90 minutes, transfer

About the Registry

- ACTION Registry transitioned from CRUSADE
- Started January 2007
- Merged with AHA GWTG CAD May 2008 to become ACTION Registry-GWTG
- GWTG CAD sunset Dec. 31, 2009
- Current membership of 537 Hospitals
- Over 155,000 records submitted

Benefits of Mission: Lifeline Recognition

- ➔ **EMS Partnership**
- ➔ **Marketing**
- ➔ **Participation in national database**
 - Allows benchmarking
 - Changes treatment practices
- ➔ **Improved outcomes**
 - Decreased mortality
 - Decreased disability

Premier vs. Limited

Detailed

ACTION Registry-GWTG Premier

- Approximately 280 fields (not counting Section K)
- Simple/Average patient 100-150 fields
- Complicated patient 150-200 fields
- Non PCI centers 100 fields
- Available to all ACTION Registry-GWTG participants.

ACTION Registry-GWTG Limited

- ➔ Approximately 140 fields (not counting Section K)
- ➔ Simple/Average patient 60-80 fields
- ➔ Complicated patient 80-100 fields
- ➔ Non PCI centers 60 fields
- ➔ Available to all ACTION Registry-GWTG participants.
- ➔ Strongly encourage participants to use full data set, especially PPCI capable centers.

Demographics & Admission

ACTION Registry[®] GWTG[™]		NCDR[®] ACTION Registry[®] v2.1 Acute Coronary Treatment and Intervention Outcomes Network Registry		
A. DEMOGRAPHICS				
Last Name²⁰⁰⁰: _____		First Name²⁰¹⁰: _____		
Middle Name²⁰²⁰: _____		Birth Date²⁰⁵⁰: _____		
SSN²⁰³⁰: _____		<input type="checkbox"/> SSN N/A²⁰³¹		
Patient ID²⁰⁴⁰: _____		Other ID²⁰⁴⁵: _____		
Race:		Hispanic or Latino Ethnicity²⁰⁷⁶: <input type="radio"/> No <input type="radio"/> Yes		
<input type="checkbox"/> White ²⁰⁷⁰		<input type="checkbox"/> Black/African American ²⁰⁷¹		
<input type="checkbox"/> American Indian/Alaskan Native ²⁰⁷³		<input type="checkbox"/> Asian ²⁰⁷²		
<input type="checkbox"/> Native Hawaiian/Pacific Islander ²⁰⁷⁴		<input type="radio"/> Male <input type="radio"/> Female		
B. ADMISSION				
Patient Zip Code³⁰⁰⁰: _____		<input type="checkbox"/> Zip Code N/A³⁰⁰¹		
Means of Transport to First Facility³¹⁰⁰: <input type="radio"/> Self/Family <input type="radio"/> Ambulance <input type="radio"/> Mobile ICU <input type="radio"/> Air				
→ If Ambulance or Mobile ICU or Air, Pre-Arrival 1st Med. Contact Date/Time^{3105, 3106}: _____ <input type="checkbox"/> Time Estimated³¹⁰⁷				
Transferred from Outside Facility³¹¹⁰: <input type="radio"/> No <input type="radio"/> Yes → If Yes, Means of Transfer³¹¹⁵: <input type="radio"/> Ambulance <input type="radio"/> Mobile ICU <input type="radio"/> Air				
→ If Yes, Arrival at Outside Facility Date/Time^{3120, 3121}: _____ <input type="checkbox"/> Time Estimated³¹²²				
→ If Yes, Transfer from Outside Facility Date/Time^{3125, 3126}: _____ <input type="checkbox"/> Time Estimated³¹²⁷				
→ If Yes, Name of Transferring Facility/AHA Number^{3150, 3151}: _____				
Your Facility	Arrival Date/Time^{3200, 3201}: _____		Location of First Evaluation³²²⁰: <input type="radio"/> ED <input type="radio"/> Cath Lab <input type="radio"/> Other	
	Admission Date³²¹⁰: _____		→ If ED, Transfer Out Date/Time^{3221, 3222}: _____	
	Insurance Payors: (check all that apply)			
	<input type="checkbox"/> Private Health Insurance ³³⁰⁰		<input type="checkbox"/> Medicare ³³⁰¹	
<input type="checkbox"/> State-Specific Plan (non-Medicaid) ³³⁰⁴		<input type="checkbox"/> Medicaid ³³⁰²		
<input type="checkbox"/> Indian Health Service ³³⁰⁵		<input type="checkbox"/> Military Health Care ³³⁰³		
<input type="checkbox"/> Non-US Insurance ³³⁰⁶		<input type="checkbox"/> None ³³⁰⁷		
HIC #³³²⁰: _____				
C. CARDIAC STATUS ON FIRST MEDICAL CONTACT				

Cardiac Status & History

C. CARDIAC STATUS ON FIRST MEDICAL CONTACT			
Symptom Onset Date/Time ^{4000, 4001} :		<input type="checkbox"/> Time Estimated ⁴⁰⁰²	<input type="checkbox"/> Time Not Available ⁴⁰⁰³
First ECG Obtained ⁴⁰¹⁰ : <input type="radio"/> Pre-Hospital (e.g. ambulance) <input type="radio"/> After 1st hosp. arrival		First ECG Date/Time ^{4020, 4021} :	
STEMI or STEMI Equivalent ⁴⁰³⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, ECG Findings ⁴⁰⁴⁰ : <input type="radio"/> ST elevation <input type="radio"/> LBBB (new or presumed new) <input type="radio"/> Isolated posterior MI			
→ If Yes, STEMI or STEMI Equivalent First Noted ⁴⁰⁴¹ : <input type="radio"/> First ECG <input type="radio"/> Subsequent ECG			
→ If Subsequent ECG, Subsequent ECG with STEMI or STEMI Equivalent Date/Time ^{4042, 4043} : _____			
→ If No, Other ECG Findings ⁴⁰⁴⁴ : (demonstrated within first 24 hours of medical contact)		<input type="radio"/> New or presumed new ST depression	<input type="radio"/> New or presumed new T-Wave inversion
		<input type="radio"/> Transient ST elevation lasting < 20 minutes	<input type="radio"/> None
Heart Failure ⁴¹⁰⁰ :	<input type="radio"/> No <input type="radio"/> Yes	Heart Rate ⁴¹²⁰ :	(bpm) Systolic BP ⁴¹³⁰ : (mmHg)
Cardiogenic Shock ⁴¹¹⁰ :	<input type="radio"/> No <input type="radio"/> Yes	Cocaine Use ⁴¹¹⁵ : <input type="radio"/> No <input type="radio"/> Yes	
D. HISTORY AND RISK FACTORS			
Height ⁵⁰⁰⁰ :	(cm)	Prior MI ⁵⁰⁸⁰ :	<input type="radio"/> No <input type="radio"/> Yes
Weight ⁵⁰¹⁰ :	(kg)	Prior Heart Failure (previous Hx) ⁵⁰⁹⁰ :	<input type="radio"/> No <input type="radio"/> Yes
Current/Recent Smoker (< 1 year) ⁵⁰²⁰ :	<input type="radio"/> No <input type="radio"/> Yes	Prior PCI ⁵¹⁰⁰ :	<input type="radio"/> No <input type="radio"/> Yes
Hypertension ⁵⁰³⁰ :	<input type="radio"/> No <input type="radio"/> Yes	→ If Yes, Most Recent PCI Date ⁵¹⁰¹ :	_____
Dyslipidemia ⁵⁰⁴⁰ :	<input type="radio"/> No <input type="radio"/> Yes	Prior CABG ⁵¹¹⁰ :	<input type="radio"/> No <input type="radio"/> Yes
Currently on Dialysis ⁵⁰⁵⁰ :	<input type="radio"/> No <input type="radio"/> Yes	→ If Yes, Most Recent CABG Date ⁵¹¹¹ :	_____
Chronic Lung Disease ⁵⁰⁶⁰ :	<input type="radio"/> No <input type="radio"/> Yes	Atrial Fibrillation or Flutter (past 2 wks) ⁵¹²⁰ :	<input type="radio"/> No <input type="radio"/> Yes
Diabetes Mellitus ⁵⁰⁷⁰ :	<input type="radio"/> No <input type="radio"/> Yes	Cerebrovascular Disease ⁵¹³⁰ :	<input type="radio"/> No <input type="radio"/> Yes
→ If Yes, Diabetes Therapy ⁵⁰⁷¹ :	<input type="radio"/> None <input type="radio"/> Diet <input type="radio"/> Oral <input type="radio"/> Insulin <input type="radio"/> Other	→ If Yes, Prior Stroke ⁵¹³¹ :	<input type="radio"/> No <input type="radio"/> Yes
		Peripheral Arterial Disease ⁵¹⁴⁰ :	<input type="radio"/> No <input type="radio"/> Yes

Medications

E. MEDICATIONS

Oral Medications

Medication	Home Meds	Medications Administered in First 24 Hours (Up to 24 hours after first medical contact*)	Medications Prescribed At Hospital Discharge (do not code for patients who die or are AMA or are transferred to another hospital)
Aspirin ⁶⁰⁰⁰⁻⁶⁰²¹	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Start Date/Time: _____ * Note: code "Yes" for Aspirin if admin. 24 hrs before or after first medical contact	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Dose: _____mg
Clopidogre ⁶⁰⁵⁰⁻⁶⁰⁷²	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Start Date/Time: _____ → If Yes, Dose: _____mg	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Dose: _____mg → If Yes, Recommended Duration: _____mos.
Ticlopidine ⁶¹⁰⁰⁻⁶¹²²	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Start Date/Time: _____ → If Yes, Dose: _____mg	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Dose: _____mg → If Yes, Recommended Duration: _____mos.
Prasugre ⁶¹⁵⁰⁻⁶¹⁷²	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Start Date/Time: _____ → If Yes, Dose: _____mg	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Dose: _____mg → If Yes, Recommended Duration: _____mos.
Warfarin ⁶²⁰⁰⁻⁶²²⁰	<input type="radio"/> No <input type="radio"/> Yes		<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded
Beta Blocker ⁶²⁵⁰⁻⁶²⁷⁰	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Start Date/Time: _____	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded
ACE Inhibitor ⁶³⁰⁰⁻⁶³²⁰	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded
Angiotensin Receptor Blocker ⁶³⁵⁰⁻⁶³⁷⁰	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded
Aldosterone Blocking Agent ⁶⁴⁰⁰⁻⁶⁴²⁰	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded
Statin ⁶⁴⁵⁰⁻⁶⁴⁷⁰	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded
Non-Statin Lipid-Lowering Agent ⁶⁵⁰⁰⁻⁶⁵²⁰	<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded

Anticoagulants

Non-Statins Lipid-Lowering Agent⁶⁵⁰⁰⁻⁶⁵²⁰ No Yes No Yes Contraindicated Blinded No Yes Contraindicated Blinded

Intravenous and Subcutaneous Medications

Category	Medications Administered
GP IIb/IIIa Inhibitor⁶⁸⁰⁰ (any time during this hospitalization)	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Medication Type ⁶⁸⁰¹ : <input type="radio"/> Eptifibatide <input type="radio"/> Tirofiban <input type="radio"/> Abciximab → If Yes, Start Date/Time ^{6802, 6803} : _____ → If Yes, Stop Date/Time ^{6804, 6805} : _____ → If Eptifibatide or Tirofiban, Dose ⁶⁸⁰⁶ : <input type="radio"/> Full <input type="radio"/> Reduced <input type="radio"/> Other
Anticoagulant⁶⁸⁵⁰	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated <input type="radio"/> Blinded → If Yes, Medication Type(s):
	<input type="checkbox"/> IV Unfractionated Heparin ⁶⁸⁵¹ Start Date/Time ^{6852, 6853} : _____ Initial Bolus ⁶⁸⁵⁴ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Initial Bolus Dose ⁶⁸⁵⁵ : _____ units Initial Infusion ⁶⁸⁵⁶ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Initial Infusion Dose ⁶⁸⁵⁷ : _____ units/hr
	<input type="checkbox"/> Enoxaparin (LMWH) ⁶⁸⁶⁰ Start Date/Time ^{6861, 6862} : _____ Initial SubQ Dose ⁶⁸⁶³ : _____ mg Initial IV Bolus ⁶⁸⁶⁴ : <input type="radio"/> No <input type="radio"/> Yes Injection Freq. ⁶⁸⁶⁵ : <input type="radio"/> q12hr <input type="radio"/> q24hr <input type="radio"/> None
	<input type="checkbox"/> Dalteparin (LMWH) ⁶⁸⁷⁰ Start Date/Time ^{6871, 6872} : _____ Initial SubQ Dose ⁶⁸⁷³ : _____ units
	<input type="checkbox"/> Bivalirudin ⁶⁸⁷⁵ Start Date/Time ^{6876, 6877} : _____
	<input type="checkbox"/> Fondaparinux ⁶⁸⁸⁰ Start Date/Time ^{6881, 6882} : _____
	<input type="checkbox"/> Argatroban ⁶⁸⁸⁵ Start Date/Time ^{6886, 6887} : _____
	<input type="checkbox"/> Lepirudin ⁶⁸⁹⁰ Start Date/Time ^{6891, 6892} : _____

Procedures

F. PROCEDURES AND TESTS			
Non-invasive Stress Testing ⁷⁰⁰⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Date ⁷⁰⁰¹ :		LVEF ⁷⁰¹⁰ : %	<input type="checkbox"/> LVEF Not Assessed ⁷⁰¹¹
Diagnostic Coronary Angiography ⁷⁰²⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Angiography Date/Time ^{7021, 7022} :			
→ If Yes, Best Estimate of Coronary Anatomy:			
Coronary Territory	Coronary Artery Stenosis	Coronary Territory	Coronary Artery Stenosis
Left Main ⁷⁰²³ :	% <input type="checkbox"/> Not Available ⁷⁰²⁴	CIRC, OMs, LPDA & LPL Branches ⁷⁰²⁹ :	% <input type="checkbox"/> Not Available ⁷⁰³⁰
Prox. LAD ⁷⁰²⁵ :	% <input type="checkbox"/> Not Available ⁷⁰²⁶	RCA, RPDA, RPL, AM Branches ⁷⁰³¹ :	% <input type="checkbox"/> Not Available ⁷⁰³²
Mid/Distal LAD, Diag Branches ⁷⁰²⁷ :	% <input type="checkbox"/> Not Available ⁷⁰²⁸	Ramus ⁷⁰³³ :	% <input type="checkbox"/> Not Available ⁷⁰³⁴
→ If No, Diagnostic Cath Contraindication ⁷⁰³⁵ : <input type="radio"/> No <input type="radio"/> Yes			
PCI ⁷¹⁰⁰ : <input type="radio"/> No <input type="radio"/> Yes			
→ If Yes, Cath Lab Arrival Date/Time ^{7101, 7102} :			
→ If Yes, First Device Activation Date/Time ^{7103, 7104} :			
→ If Yes, Stent(s) Placed ⁷¹⁰⁵ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Stent Type(s): <input type="checkbox"/> Bare metal stent ⁷¹⁰⁶ <input type="checkbox"/> Drug eluting stent ⁷¹⁰⁷ <input type="checkbox"/> Other ⁷¹⁰⁸			
→ If Yes, PCI Indication ⁷¹⁰⁹ : <input type="radio"/> Immediate, primary PCI for STEMI <input type="radio"/> Rescue PCI (after failed full-dose lytics for STEMI)			
<input type="radio"/> PCI for NSTEMI <input type="radio"/> Stable, successful reperfusion for STEMI, or completed infarction post-STEMI <input type="radio"/> Other			
→ If Immediate, Primary PCI for STEMI, Non-System Reason for Delay in PCI ⁷¹¹⁰ :			
<input type="radio"/> Difficult vascular access		<input type="radio"/> Cardiac arrest and/or need for intubation before PCI	
<input type="radio"/> Patient delays in providing consent for the procedure		<input type="radio"/> Difficulty crossing the culprit lesion during the PCI procedure	
<input type="radio"/> Other		<input type="radio"/> None	
CABG ⁷²⁰⁰ : <input type="radio"/> No <input type="radio"/> Yes			
→ If Yes, CABG Date/Time ^{7201, 7202} :			

Thrombolytics

→ If Yes, CABG Date/Time^{7201, 7202}: _____

G. REPERFUSION STRATEGY (IMMEDIATE REPERFUSION)

Was Patient a Reperfusion Candidate⁸⁰⁰⁰ No Yes

→ If No, Primary Reason⁸⁰¹⁰:

- | | |
|---|---|
| <input type="radio"/> Non-compressible vascular puncture(s) | <input type="radio"/> Significant closed head or facial trauma within previous 3 months |
| <input type="radio"/> Active bleeding on arrival or within 24 hours | <input type="radio"/> Prior allergic reaction to thrombolytics or IV contrast |
| <input type="radio"/> Known bleeding diathesis | <input type="radio"/> Current use of oral anticoagulants |
| <input type="radio"/> Recent bleeding within previous 4 weeks | <input type="radio"/> Active peptic ulcer |
| <input type="radio"/> History of CVA | <input type="radio"/> Quality of life decision |
| <input type="radio"/> Recent surgery/trauma | <input type="radio"/> Comorbid disease |
| <input type="radio"/> Intracranial neoplasm, AV malformation, or aneurysm | <input type="radio"/> Traumatic CPR that precludes thrombolytics |
| <input type="radio"/> Severe uncontrolled hypertension | <input type="radio"/> Anatomy not suitable to primary PCI |
| <input type="radio"/> No ST elevation/LBBB | <input type="radio"/> Spontaneous reperfusion (documented by cath only) |
| <input type="radio"/> ST elevation resolved | <input type="radio"/> Patient/family refusal |
| <input type="radio"/> MI diagnosis unclear | <input type="radio"/> DNR at time of treatment decision |
| <input type="radio"/> MI symptoms onset >12 hours | <input type="radio"/> Ischemic stroke w/in 3 months except acute ischemic stroke w/in 3 hours |
| <input type="radio"/> Chest pain resolved | <input type="radio"/> Any prior intracranial hemorrhage |
| <input type="radio"/> No chest pain | <input type="radio"/> Pregnancy |
| <input type="radio"/> Suspected aortic dissection | <input type="radio"/> Other (Not Listed) |

→ If Yes, Thrombolytics⁸⁰²⁰: No Yes → If Yes, Strength of Dose⁸⁰²¹: Full dose Reduced dose

→ If Yes, Type of Thrombolytics⁸⁰²²: Tenecteplase Alteplase Reteplase Streptokinase Other

→ If Yes, Dose Start Date/Time^{8023, 8024}: _____

→ If Yes, Non-System Reason for Delay⁸⁰²⁵: No Yes

Clinical Events & Biomarkers

H. IN-HOSPITAL CLINICAL EVENTS

Reinfarction⁹⁰⁰⁰: No Yes

→ If Yes, Date⁹⁰⁰¹: _____

Cardiogenic Shock⁹⁰¹⁰: No Yes

→ If Yes, Date⁹⁰¹¹: _____

Heart Failure⁹⁰²⁰: No Yes

→ If Yes, Date⁹⁰²¹: _____

CVA/Stroke⁹⁰³⁰: No Yes

→ If Yes, Date⁹⁰³¹: _____

→ If Yes, Hemorrhagic⁹⁰³²: No Yes

Suspected Bleeding Event⁹⁰⁴⁰: No Yes

→ If Yes, Suspected Bleeding Event Date⁹⁰⁴¹: _____

→ If Yes, Bleeding Event Location (check all that apply):

Access Site⁹⁰⁴² Retroperitoneal⁹⁰⁴³ GI⁹⁰⁴⁴ GU⁹⁰⁴⁵ Other⁹⁰⁴⁶

→ If Yes, Surgical Procedure or Intervention Required⁹⁰⁴⁷: No Yes

RBC/Whole Blood Transfusion⁹⁰⁵⁰: No Yes

→ If Yes, First Transfusion Date⁹⁰⁵¹: _____

→ If Yes, CABG-Related Transfusion⁹⁰⁵²: No Yes

I. LABORATORY RESULTS

CARDIAC MARKERS

Positive Cardiac Markers Within First 24 Hours¹⁰⁰⁰⁰: No Yes

	Troponin	CK-MB
Initial	<p>Collected¹⁰⁰¹⁰: <input type="radio"/> No <input type="radio"/> Yes - I <input type="radio"/> Yes - T</p> <p>→ If Yes, Date/Time^{10011, 10012}: _____</p> <p>→ If Yes, Value¹⁰⁰¹³: _____ (ng/mL)</p> <p>→ URL¹⁰⁰¹⁴: _____</p>	<p>Collected¹⁰⁰²⁰: <input type="radio"/> No <input type="radio"/> Yes</p> <p>→ If Yes, Date/Time^{10021, 10022}: _____</p> <p>→ If Yes, Value¹⁰⁰²³: _____ <input type="radio"/> IU/L <input type="radio"/> % <input type="radio"/> (mg/mL)/IU <input type="radio"/> ng/mL</p> <p>→ ULN¹⁰⁰²⁵: _____</p>
Peak	<p>Collected¹⁰⁰³⁰: <input type="radio"/> No <input type="radio"/> Yes - I <input type="radio"/> Yes - T</p> <p>→ If Yes, Date/Time^{10031, 10032}: _____</p> <p>→ If Yes, Value¹⁰⁰³³: _____ (ng/mL)</p> <p>→ URL¹⁰⁰³⁴: _____</p>	<p>Collected¹⁰⁰⁴⁰: <input type="radio"/> No <input type="radio"/> Yes</p> <p>→ If Yes, Date/Time^{10041, 10042}: _____</p> <p>→ If Yes, Value¹⁰⁰⁴³: _____ <input type="radio"/> IU/L <input type="radio"/> % <input type="radio"/> (mg/mL)/IU <input type="radio"/> ng/mL</p> <p>→ ULN¹⁰⁰⁴⁵: _____</p>

Labs

Peak	→ If Yes, Value ¹⁰⁰³³ : _____ (ng/mL) → URL ¹⁰⁰³⁴ : _____	→ If Yes, Value ¹⁰⁰⁴³ : _____ <input type="radio"/> IU/L <input type="radio"/> % <input type="radio"/> (mg/mL)/IU <input type="radio"/> ng/mL → ULN ¹⁰⁰⁴⁵ : _____
CREATININE		
Initial	Collected ¹⁰¹⁰⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Date/Time ^{10101, 10102} : _____ → If Yes, Value ¹⁰¹⁰³ : _____ (mg/dL)	Peak Collected ¹⁰¹¹⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Date/Time ^{10111, 10112} : _____ → If Yes, Value ¹⁰¹¹³ : _____ (mg/dL)
HEMOGLOBIN		
Initial	Collected ¹⁰¹⁵⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Date/Time ^{10151, 10152} : _____ → If Yes, Value ¹⁰¹⁵³ : _____ (g/dL)	Lowest Collected ¹⁰²⁰⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Date/Time ^{10201, 10202} : _____ → If Yes, Value ¹⁰²⁰³ : _____ (g/dL)
INITIAL HEMOGLOBIN A1C		
Collected ¹⁰²⁵⁰ <input type="radio"/> No <input type="radio"/> Yes → If Yes, Date/Time ^{10251, 10252} : _____ → If Yes, Value ¹⁰²⁵³ : _____ %		
INITIAL INR		
Collected ¹⁰³⁰⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Date/Time ^{10301, 10302} : _____ → If Yes, Value ¹⁰³⁰³ : _____		
LIPIDS (mg/dL)		
Panel Performed ¹⁰³⁵⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Date/Time ^{10351, 10352} : _____ <input type="checkbox"/> Value Out of Range ¹⁰³⁶⁰ → If Yes, TC ¹⁰³⁵³ : _____ → If Yes, HDL ¹⁰³⁵⁴ : _____ → If Yes, LDL ¹⁰³⁵⁵ : _____ → If Yes, Triglycerides ¹⁰³⁵⁶ : _____		
INITIAL BNP		INITIAL NT-PROBNP
Collected ¹⁰⁴⁰⁰ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Value ¹⁰⁴⁰¹ : _____ (pg/mL)		Collected ¹⁰⁴⁰⁵ : <input type="radio"/> No <input type="radio"/> Yes → If Yes, Value ¹⁰⁴⁰⁶ : _____ (pg/mL)

Discharge

ACTION Registry[®]-GWTG[™]

NCDR[®] ACTION Registry[®] v2.1
Acute Coronary Treatment and Intervention Outcomes Network Registry

J. DISCHARGE

Discharge Date¹¹⁰⁰⁰:

Comfort Measures Only¹¹⁰¹⁰: No Yes

Enrolled in Clinical Trial During Hospitalization¹¹⁰²⁰: No Yes

Discharge Status¹¹¹⁰⁰: Alive Deceased

→ **If Alive, Smoking Counseling¹¹¹⁰¹:** No Yes

→ **If Alive, Dietary Modification Counseling¹¹¹⁰²:** No Yes N/A

→ **If Alive, Exercise Counseling¹¹¹⁰³:** No Yes Ineligible

→ **If Alive, Cardiac Rehabilitation Referral¹¹¹⁰⁴:** No Yes Ineligible

→ **If Alive, Discharge Location¹¹¹⁰⁵:** Home Extended care/transitional care unit Other hospital

Nursing home Hospice Other Left against medical advice (AMA)

→ **If Other Hospital, Transfer Time¹¹¹⁰⁶:** _____

→ **If Other Hospital, Transfer for PCI¹¹¹⁰⁷:** No Yes

→ **If Other Hospital, Transfer for CABG¹¹¹⁰⁸:** No Yes

→ **If Deceased, Cause of Death¹¹¹⁵⁰:** Cardiac Non-cardiac

→ **If Deceased, Time of Death¹¹¹⁵¹:** _____

K. OPTIONAL ELEMENTS (FOR AMI CORE MEASURE REPORTING ONLY)

Point of Origin¹²⁰⁰⁰: Non-health care facility Court/law enforcement

Clinic Information not available

Transfer from a hospital (different facility) D: Transfer from one distinct unit of the hospital to another

How to join ACTION Registry-GWTG

- ➔ Go to the ACTION Registry-GWTG “How to Join” page at www.ncdr.com to download the appropriate participation documents
 - If you do not currently participate in an NCDR registry (CARE Registry®, CathPCI Registry®, ICD Registry™), sign the NCDR Master Agreement and the ACTION Registry-GWTG Addendum
 - If you currently participate in an NCDR registry, sign the ACTION Registry-GWTG Addendum
 - Return your completed documents to NCDR as instructed on the forms

Next steps

- Join the Registry- **No cost**
- Select your tool/ vendor
- Select the Premier/Limited form
- Review Webinars and Documents
- Start entering data
- Utilize your On-Demand Reports then your Quarterly Reports to direct your PI goals