American Heart Association®
Mission:Lifeline®
EMS

2023 Mission: Lifeline EMS

Recognition Measures

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AHAEMS1: Pre-Arrival Notification for Suspected Stroke

The percentage of EMS patients aged 18 years and older transported from the scene with a primary or secondary impression of stroke whom a pre-arrival alert for stroke was activated during the EMS encounter.

Initial Patient Population

Patients aged 18 years and older with a suspected stroke transported from the scene from a 911 request	(
	(ePatient.15 Age is greater than or equal to 18 and ePatient.16 Age Units is 2546009 ("Years")) and (eSituation.11 Provider's Primary Impression matches\^|(I60)(I61)|(I63)|(G45)|(G46)/ or eSituation.12 Provider's Secondary Impressions matches\^|(I60)(I61)|(I63)|(G45)|(G46)/) and eDisposition.30 Transport Disposition is in (4230001 ("Transport by This EMS Unit (This Crew Only)"), 4230003 ("Transport by This EMS Unit, with a Member of Another Crew"), 4230007 ("Transport by Another EMS Unit, with a Member of This Crew")) and eResponse.05 Type of Service Requested is in (2205001 ("Emergency Response (Primary Response Area)"), 2205003 ("Emergency Response (Intercept)"), 2205009 ("Emergency Response (Mutual Aid)")))

Denominator

Include:	Data Elements for Calculation
Patients in the initial population	Equals Initial Population
Exclusions: (Always remove from denominator)	
Patient died prior to arrival to hospital	[eDisposition.19 Final Patient Acuity](#) is 4219909 ("Dead with Resuscitation Efforts (Black)")
Exceptions: (Remove from denominator if present and numerator is not met)	
None	N/A

Numerator

Pre-arrival alert for stroke initiated during the EMS encounter	[eDisposition.24 Destination Team Pre-Arrival Alert or Activation](#) is 4424015 ("Stroke")

AHAEMS2: Documentation of Last Known Well for Patients with Suspected Stroke

The percentage of EMS patients aged 18 years and older transported from the scene with suspected stroke for whom Last Known Well was documented during the EMS encounter.

Initial Patient Population

Patients aged 18 years and older with suspected stroke transported from the scene from a 911 request	(
	    (ePatient.15 Age is greater than or equal to 18
	    and
	    ePatient.16 Age Units is 2546009 ("Years"))
	and
	
	    (eSituation.11 Provider's Primary Impression
	    matches\^|(I60)(I61)|(I63)|(G45)|(G46)/
	    or
	    eSituation.12 Provider's Secondary Impressions
	    matches\^|(I60)(I61)|(I63)|(G45)|(G46)/)
	and
	
	    eDisposition.30 Transport Disposition is in (
	    4230001 ("Transport by This EMS Unit (This Crew Only)"),
	    4230003 ("Transport by This EMS Unit, with a Member of Another Crew"),
	    4230007 ("Transport by Another EMS Unit, with a Member of This Crew"))
	and
	
	    eResponse.05 Type of Service Requested is in (
	    2205001 ("Emergency Response (Primary Response Area)"),
	    2205003 ("Emergency Response (Intercept)"),
	    2205009 ("Emergency Response (Mutual Aid)")))

Denominator

Include:	Data Elements for Calculation
Patients in the Initial Population	Equals Initial Population
Exclusions: (Always remove from denominator)	
Patients with an altered level of consciousness (AVPU less than A or GCS less than 15)	(eVitals.26 Level of Responsiveness (AVPU) is in (3326003 ("Verbal"), 3226005 ("Painful"), 3226007 ("Unresponsive")) or eVitals.23 Total Glasgow coma Score is less than 15)
Exceptions: (Remove from denominator if present and numerator is not met)	
None	N/A

Numerator

Last Known Well documented during the EMS encounter	eSituation.18 Date/Time Last Known Well is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded"))

AHAEMS3: Evaluation of Blood Glucose for Patients with Suspected Stroke

The percentage of EMS patients aged 18 years and older transported from the scene with suspected stroke for whom blood glucose was evaluated during the EMS encounter.

Initial Patient Population

Patients aged 18 years and older with suspected stroke transported from the scene from a 911 request	((ePatient.15 Age is greater than or equal to 18 and ePatient.16 Age Units is 2546009 ("Years")) and (eSituation.11 Provider's Primary Impression matches\^|(I60)(I61)|(I63)|(G45)|(G46)/ or eSituation.12 Provider's Secondary Impressions matches\^|(I60)(I61)|(I63)|(G45)|(G46)/) and eDisposition.30 Transport Disposition is in (4230001 ("Transport by This EMS Unit (This Crew Only)"), 4230003 ("Transport by This EMS Unit, with a Member of Another Crew"), 4230007 ("Transport by Another EMS Unit, with a Member of This Crew")) and eResponse.05 Type of Service Requested is in (2205001 ("Emergency Response (Primary Response Area)"), 2205003 ("Emergency Response (Intercept)"), 2205009 ("Emergency Response (Mutual Aid)")))

Denominator

Include:	Data Elements for Calculation
Patients in the Initial Population	Equals Initial Population
Exclusions: (Always remove from denominator)	
Patients who died prior to hospital arrival	eDisposition.19 Final Patient Acuity is 4219909 ("Dead with Resuscitation Efforts (Black)")
Exceptions: (Remove from denominator if present and numerator is not met)	
Documented reason(s) for not evaluating blood glucose: • Patient refused blood glucose evaluation Unable to complete blood glucose evaluation (e.g., No glucose monitor available)	eVitals.18 Blood Glucose Level is in (8801019 ("Refused"), 8801023 ("Unable to Complete"))

Numerator

Blood glucose evaluated during the EMS encounter	eVitals.18 Blood Glucose Level is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded"))

AHAEMS4: Stroke Screen Performed and Documented

The percentage of EMS patients aged 18 years and older transported from the scene with a suspected stroke for whom a stroke screen was performed and documented during the EMS encounter.

Initial Patient Population

Patients aged 18 years and older with a suspected stroke transported from the scene from a 911 request	((ePatient.15 Age is greater than or equal to 18 and ePatient.16 Age Units is 2546009 ("Years")) and (eSituation.11 Provider's Primary Impression matches\^|(I60)(I61)|(I63)|(G45)|(G46)/ or eSituation.12 Provider's Secondary Impressions matches\^|(I60)(I61)|(I63)|(G45)|(G46)/) and eDisposition.30 Transport Disposition is in (4230001 ("Transport by This EMS Unit (This Crew Only)"), 4230003 ("Transport by This EMS Unit, with a Member of Another Crew"), 4230007 ("Transport by Another EMS Unit, with a Member of This Crew")) and eResponse.05 Type of Service Requested is in (2205001 ("Emergency Response (Primary Response Area)"), 2205003 ("Emergency Response (Intercept)"), 2205009 ("Emergency Response (Mutual Aid)")))

Denominator

Include:	Data Elements for Calculation
Patients in the Initial Population	Equals Initial Population
Exclusions: (Always remove from denominator)	
Patients who died prior to hospital arrival	eDisposition.19 Final Patient Acuity is 4219909 ("Dead with Resuscitation Efforts (Black)")
Exceptions: (Remove from denominator if present and numerator is not met)	

Documented reasons for not performing stroke screen:
• Altered level of consciousness (AVPU less than A or GCS less than 15)
• Patient refused stroke screen
 	
Unable to complete stroke screen (e.g., patient in cardiac arrest, trauma injury, other time-sensitive conditions requiring care)
	(
	    (eVitals.26 Level of Responsiveness (AVPU) is in
	    (
	    3326003 ("Verbal"),
	    3326005 ("Painful"),
	    3326007 ("Unresponsive"))
	or
	    eVitals.23 Total Glasgow Coma Score is less than 15)
	or
	    eVitals.29 Stroke Scale Score is in
	    (
	    8801019 ("Refused"),
	    8801023 ("Unable to Complete")))

Numerator

Stroke screen performed and severity documented	(
	    eVitals.30 Stroke Scale Type is in
	    (
	    3330001 ("Cincinnati Prehospital Stroke Scale (CPSS)"),
	    3330004 ("Los Angeles prehospital Stroke Screen (LAPSS)"),
	    3330005 ("Massachusetts Stroke Scale (MSS)"),
	    3330007 ("Miami Emergency Neurologic Deficit Exam (MEND)"),
	    3330009 ("NIH Stroke Scale (NIHSS)"),
	    3330011 ("Other Stroke Scale Type"),
	    3330013 ("FAST-ED"),
	    3330015 ("Boston Stroke Scale (BOSS)"),
	    3330017 ("Ontario Prehospital Stroke Scale (OPSS)"),

		3330019 ("Melbourne Ambulance Stroke Screen (MASS)"), 3330021 ("Rapid Arterial Occlusion Evaluation (RACE)"), 3330023 ("Los Angeles Motor Score (LAMS)"))
	and	[eVitals.29 Stroke Scale Score](#) is in (3329001 ("Negative"), 3329003 ("Non-Conclusive"), 3329005 ("Positive")))

AHAEMS5: 12-lead ECG performed ≤ 10 minutes for Suspected Heart Attack

The percentage of EMS patients aged 18 years and older transported from the scene with chest pain or a suspected MI for whom a 12-Lead ECG was performed ≤ 10 minutes of first medical contact.

Initial Patient Population

Patients aged 18 years and older with chest pain or a suspected MI transported from the scene from a 911 request	((ePatient.15 Age is greater than or equal to 18 and ePatient.16 Age Units is 2546009 ("Years")) and eSituation.11 Provider's Primary Impression matches\^ (I20.9)|(I21)|(I21.3)|(I21.4)|(I46.9)|(I49.9)|(J80)|(J81.0)|R06.00|R06.02|(R07.9)|(R11)|R53.81|(R55)/ and eDisposition.30 Transport Disposition is in (4230001 ("Transport by This EMS Unit (This Crew Only)"), 4230003 ("Transport by This EMS Unit, with a Member of Another Crew"), 4230007 ("Transport by Another EMS Unit, with a Member of This Crew")) and eResponse.05 Type of Service Requested is in (2205001 ("Emergency Response (Primary Response Area)"), 2205003 ("Emergency Response (Intercept)"), 2205009 ("Emergency Response (Mutual Aid)")))

Denominator

Include:	Data Elements for Calculation
Patients with a 12-lead ECG performed during the EMS encounter	eVitals.04 ECG Type is in (3304007 ("12 Lead-Left Sided (Normal)"), 3304009 ("12 Lead-Right Sided"), 3304011 ("15 Lead"), 3304013 ("18 Lead"))

Exclusions: (Always remove from denominator)

None	N/A

Exceptions: (Remove from denominator if present and numerator is not met)

| Patients in cardiac arrest
or
Patients requiring advanced airway management prior to ECG
or
Patients in shock or with injury, requiring stabilization
or
Patients refused care | (
    (eArrest.01 Cardiac Arrest is in (
    3001003 ("Yes, Prior to Any EMS Arrival (includes EMS & Medical First Responders)"),
    3001005 ("Yes, After Any EMS Arrival (includes Transport EMS & Medical First Responders)")
or
    ((eAirway.10 Date/Time Decision to Manage the Patient with an Invasive Airway is not null
is before
    first (eVitals.04 ECG Type is in (
    3304007 ("12 Lead-Left Sided (Normal)"),
    3304009 ("12 Lead-Right Sided"),
    3304011 ("15 Lead"),
    3304013 ("18 Lead")))
where
    (eVitals.01 Date/Time Vital Signs Taken is not null
sorted by
    eVitals.01 Date/Time Vital Signs Taken))
or
    eProtocols.01 Protocols Used is 9914127 ("Medical-Hypotension/Shock (Non-Trauma)")
or
    eSituation.02 Injury is 9922005 ("Yes")
or
    eDisposition.28 Patient Evaluation/Care is in
    (
    4228003 ("Patient Evaluated and |

	Refused Care"), 4228007 ("Patient Refused Evaluation/Care))
	or
	eProtocols.01 Protocols Used is 9914189 ("General Refusal of Care"))
	or
	eVitals.04 ECG Type is 8801019 ("Refused"))

Numerator	
12-Lead EGG performed within 10 minutes of first medical contact	((eVitals.04 ECG Type is in (3304007 ("12 Lead-Left Sided (Normal)"), 3304009 ("12 Lead-Right Sided"), 3304011 ("15 Lead"), 3304013 ("18 Lead")) where eVitals.01 Date/Time Vital Signs Taken is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded"))) and eTimes.07 Arrived at Patient Date/Time is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded")) and (eVitals.01 Date/Time Vital Signs Taken MINUS eTimes.07 Arrived at Patient Date/Time (> 0 Minutes and <= 10 Minutes)))

AHAEMS6: Aspirin Administration for STEMI-positive ECG

Percent of EMS patients aged 18 years and older transported from the scene with a STEMI positive ECG who were administered aspirin.

Initial Patient Population

Patients aged 18 years and older with chest pain or suspected MI transported from the scene from a 911 request	(
	    (ePatient.15 Age is greater than or equal to 18 and
	    ePatient.16 Age Units is 2546009 ("Years"))
	and
	
	    eSituation.11 Provider's Primary Impression matches\^ (I20.9)|(I21)|(I21.3)|(I21.4)|(I46.9)|(I49.9)|(J80)|(J81.0)| R06.00|R06.02|(R07.9)|(R11)|R53.81|(R55)/
	and
	
	    eDisposition.30 Transport Disposition is in (
	    4230001 ("Transport by This EMS Unit (This Crew Only)"),
	    4230003 ("Transport by This EMS Unit, with a Member of Another Crew"),
	    4230007 ("Transport by Another EMS Unit, with a Member of This Crew"))
	and
	
	    eResponse.05 Type of Service Requested is in (
	    2205001 ("Emergency Response (Primary Response Area)"),
	    2205003 ("Emergency Response (Intercept)"),
	    2205009 ("Emergency Response (Mutual Aid)")))

Denominator

Include:	Data Elements for Calculation

Patients in the Initial Population with a positive 12-Lead ECG for STEMI	Initial Population
	and
	
	(
	    eVitals.04 ECG Type is in (
	    3304007 ("12 Lead-Left Sided (Normal)"),
	    3304009 ("12 Lead-Right Sided"),
	    3304011 ("15 Lead"),
	    3304013 ("18 Lead"))
	and

	eVitals.03 Cardiac Rhythm/Electrocardiography (ECG) is in (9901051 ("STEMI Anterior Ischemia"), 9901053 ("STEMI Inferior Ischemia"), 9901055 ("STEMI Lateral Ischemia"), 9901057 ("STEMI Posterior Ischemia"), 9901058 ("STEMI Septal Ischemia")))
Exclusions: (Always remove from denominator)	
None	N/A
Exceptions: (Remove from denominator if present and numerator is not met)	

Patients with a documented allergy or contraindication (e.g., Warfarin or other anticoagulant/antiplatelet medication, liver disease/cirrhosis, etc.) to aspirin
or
Patient refused medication
	((
	    eHistory.06 Medication Allergies is 9924003 ("RXNORM"), 1191 ("Aspirin")
	or
	    eHistory.06 Medication Allergies is 9924001 ("ICD-10"), T39.015 ("Adverse effect of aspirin"))
	or (
	    eMedications.03 Medications Administered is 1191 "Aspirin…"
	and
	    eMedications.03 Medications Administered is in
	(
	8801001 ("Contraindication Noted"),
	8801007 ("Medication Allergy"),
	8801003 ("Refused"))))

Numerator

Aspirin administered prior to or during the EMS encounter	(
	    eMedications.03 Medication Administered is 1191 "Aspirin…"
	or
	(
	    eMedications.03 Medication Administered is 1191 "Aspirin…"
	and
	    eMedications.03 Medication Administered is 8801009 ("Medication Already Taken")))

AHAEMS7: Pre-Arrival Notification ≤ 10 Minutes for STEMI-positive ECG

The percentage of EMS patients aged 18 years and older transported from the scene with a STEMI positive ECG for whom pre-arrival notification was activated ≤ 10 minutes of positive ECG.

Initial Patient Population

Patients aged 18 years and older with chest pain or suspected MI transported from the scene from a 911 request	(
	
	    (ePatient.15 Age is greater than or equal to 18 and
	    ePatient.16 Age Units is 2546009 ("Years"))
	and
	
	    eSituation.11 Provider's Primary Impression matches\^ (I20.9)|(I21)|(I21.3)|(I21.4)|(I46.9)|(I49.9)|(J80)|(J81.0)| R06.00|R06.02|(R07.9)|(R11)|R53.81|(R55)/
	and
	
	    eDisposition.30 Transport Disposition is in (
	    4230001 ("Transport by This EMS Unit (This Crew Only)"),
	    4230003 ("Transport by This EMS Unit, with a Member of Another Crew"),
	    4230007 ("Transport by Another EMS Unit, with a Member of This Crew"))
	and
	
	    eResponse.05 Type of Service Requested is in (
	    2205001 ("Emergency Response (Primary Response Area)"),
	    2205003 ("Emergency Response (Intercept)"),
	    2205009 ("Emergency Response (Mutual Aid)")))

Denominator

Include:	Data Elements for Calculation

Patients in the Initial Population with a positive 12-Lead ECG for STEMI and a documented STEMI pre-arrival alert	Initial Population
	and
	
	(
	    eVitals.04 ECG Type is in (
	    3304007 ("12 Lead-Left Sided (Normal)"),
	    3304009 ("12 Lead-Right Sided"),
	    3304011 ("15 Lead"),
	    3304013 ("18 Lead"))

	and

	eVitals.03 Cardiac Rhythm/Electrocardiography (ECG) is in
	    (
	    9901051 ("STEMI Anterior Ischemia"),
	    9901053 ("STEMI Inferior Ischemia"),
	    9901055 ("STEMI Lateral Ischemia"),
	    9901057 ("STEMI Posterior Ischemia"),
	    9901058 ("STEMI Septal Ischemia"))
	
	and
	
	    eDisposition.24 Destination Team Pre-Arrival Alert or Activation is 4224013 ("Yes – STEMI"))
	
	)

Exclusions: (Always remove from denominator)	
None	N/A

Exceptions: (Remove from denominator if present and numerator is not met)	

Patients in cardiac arrest
or
Patients requiring advanced airway management prior pre-arrival alert
or
Patients in shock or with injury, requiring stabilization
or
  Patients who refused
  care/transport
	(
	    (eArrest.01 Cardiac Arrest is in (
	    3001003 ("Yes, Prior to Any EMS Arrival (includes EMS & Medical First Responders)"),
	    3001005 ("Yes, After Any EMS Arrival (includes Transport EMS & Medical First Responders)")
	or
	    (eAirway.10 Date/Time Decision to Manage the Patient with an Invasive Airway is not null
	is before
	    eDisposition.25 Date/Time of Destination Prearrival Alert or Activation is not in (
	    Null
	    7701001 ("Not Applicable"),
	    7701003 ("Not Recorded")))
	or
	    eProtocols.01 Protocols Used is 9914127 ("Medical-Hypotension/Shock (Non-Trauma)")
	or
	    eSituation.02 Injury is 9922005 ("Yes")
	or
	    eDisposition.28 Patient Evaluation/Care is in
	    (
	    4228003 ("Patient Evaluated and Refused Care"),

	or 4228007 ("Patient Refused Evaluation/Care))
	eProtocols.01 Protocols Used is 9914189 ("General Refusal of Care"))
	or
	eVitals.04 ECG Type is 8801019 ("Refused"))

Numerator

Pre-arrival STEMI notification activated ≤ 10 minutes of STEMI positive ECG	(eDisposition.25 Date/Time of Destination Prearrival Alert or Activation is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded"))
	and
	(eVitals.04 ECG Type is in (3304007 ("12 Lead-Left Sided (Normal)"), 3304009 ("12 Lead-Right Sided"), 3304011 ("15 Lead"), 3304013 ("18 Lead"))
	where
	eVitals.01 Date/Time Vital Signs Taken is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded")))
	and (eDisposition.25 Date/Time of Destination Prearrival Alert or Activation MINUS eVitals.01 Date/Time Vital Signs Taken (> 0 Minutes and <= 10 Minutes)))

AHAEMS8: EMS FMC to PCI ≤ 90 Minutes for Patients with STEMI

The percentage of patients directly transported to a STEMI receiving center, with EMS First Medical Contact to PCI ≤ 90 minutes.

Initial Patient Population

Patients 18 years of age and older with a prehospital STEMI positive ECG who were directly transported to a STEMI receiving center by EMS	(
	     ([ePatient.15 Age](#) is greater than or equal to 18
	     and
	     [ePatient.16 Age Units](#) is 2546009 ("Years"))
	 and
	     [eVitals.03 Cardiac Rhythm/Electrocardiography (ECG)](#) is in (
	     9901051 ("STEMI Anterior Ischemia"),
	     9901055 ("STEMI Lateral Ischemia"),
	     9901057 ("STEMI Posterior Ischemia"),
	     9901058 ("STEMI Septal Ischemia"))
	 and
	 (
	     [eDisposition.30 Transport Disposition](#) is in (
	     4230001 ("Transport by This EMS Unit (This Crew Only)"),
	     4230003 ("Transport by This EMS Unit, with a Member of Another Crew"),
	     4230007 ("Transport by Another EMS Unit, with a Member of This Crew"))
	 and
	     [eResponse.05 Type of Service Requested](#) is in (
	     2205001 ("Emergency Response (Primary Response Area)"),
	     2205003 ("Emergency Response (Intercept)"),
	     2205009 ("Emergency Response (Mutual Aid)")
	 and
	     [eDisposition.23 Hospital Capability](#) is in (
	     9908031 ("Cardiac-STEMI/PCI Capable"),

	9908033 ("Cardiac–STEMI/PCI Capable (24/7)") 9908035 ("Cardiac–STEMI/Non–CPI Capable"))))

Denominator

Include:	Data Elements for Calculation
Patients in the Initial Population who received PCI	Initial Population and eOutcome.09 Emergency Department Procedures is (Reference ICD10PCS codes from PCI Value Set)
Exclusions: (Always remove from denominator)	
None	N/A
Exceptions: (Remove from denominator if present and numerator is not met)	

Patients in cardiac arrest
or
Patients requiring advanced airway management prior pre-arrival alert
or
Patients in shock or with injury, requiring stabilization
or
Patients who refused care/transport
	(
	  (eArrest.01 Cardiac Arrest is in (
	  3001003 ("Yes, Prior to Any EMS Arrival (includes EMS & Medical First Responders)"),
	  3001005 ("Yes, After Any EMS Arrival (includes Transport EMS & Medical First Responders)")
	or
	  (eAirway.10 Date/Time Decision to Manage the Patient with an Invasive Airway is not null
	is before
	  eDisposition.25 Date/Time of Destination Prearrival Alert or Activation is not in (
	  Null
	  7701001 ("Not Applicable"),
	  7701003 ("Not Recorded")))
	or

	eProtocols.01 Protocols Used is 9914127 ("Medical-Hypotension/Shock (Non-Trauma)")
	or
	eSituation.02 Injury is 9922005 ("Yes")
	or
	eDisposition.28 Patient Evaluation/Care is in (4228003 ("Patient Evaluated and Refused Care"), 4228007 ("Patient Refused Evaluation/Care))
	or
	eProtocols.01 Protocols Used is 9914189 ("General Refusal of Care"))
	or
	eVitals.04 ECG Type is 8801019 ("Refused"))

Numerator

Patients who received PCI ≤ 90 minutes of EMS First Medical Contact	(eTimes.07 Arrived at Patient Date/Time is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded")) and (eOutcome.09 Emergency Department Procedures is (Reference ICD10PCS codes from PCI Value Set) and eOutcome.19 Date/Time Emergency Department Procedure Performed is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded"))) and (eOutcome.19 Date/Time Emergency Department Procedure Performed

	MINUS eTimes.07 Arrived at Patient Date/Time (> 0 Minutes and <= 90 Minutes)))

AHAEMS9: FMC to Thrombolytic Administration ≤ 30 Minutes for Patients with STEMI

The percentage of patients with STEMI treated and directly transported to the destination hospital, with a door-to-thrombolytic time of ≤30 minutes

Initial Patient Population

Patients 18 years of age and older with a prehospital STEMI-positive ECG who were directly transported to a STEMI receiving center by EMS	((ePatient.15 Age is greater than or equal to 18 and ePatient.16 Age Units is 2546009 ("Years")) and eVitals.03 Cardiac Rhythm/Electrocardiography (ECG) is in (9901051 ("STEMI Anterior Ischemia"), 9901055 ("STEMI Lateral Ischemia"), 9901057 ("STEMI Posterior Ischemia"), 9901058 ("STEMI Septal Ischemia")) and (eDisposition.30 Transport Disposition is in (4230001 ("Transport by This EMS Unit (This Crew Only)"), 4230003 ("Transport by This EMS Unit, with a Member of Another Crew"), 4230007 ("Transport by Another EMS Unit, with a Member of This Crew")) and eResponse.05 Type of Service Requested is in (2205001 ("Emergency Response (Primary Response Area)"), 2205003 ("Emergency Response (Intercept)"), 2205009 ("Emergency Response (Mutual Aid)") and eDisposition.23 Hospital Capability is in (9908031 ("Cardiac-STEMI/PCI Capable"),

	9908033 ("Cardiac–STEMI/PCI Capable (24/7)") 9908035 ("Cardiac–STEMI/Non–CPI Capable"))))

Denominator

Include:	Data Elements for Calculation
Patients in the Initial Population who received thrombolytics	Initial Population and eOutcome.09 Emergency Department Procedures is (3E03017 "Introduction of Other Thrombolytic into Peripheral Vein, Open Approach…," 3E03317 "Introduction of Other Thrombolytic into peripheral Vein, Percutaneous Approach…," 3E04017 "Introduction of Other Thrombolytic into Central Vein, Open Approach…," 3E04317 "Introduction of Other Thrombolytic into Central Vein, Percutaneous Approach…")
Exclusions: (Always remove from denominator)	
None	N/A

Exceptions: (Remove from denominator if present and numerator is not met)	

Patients in cardiac arrest
or
Patients requiring advanced airway management prior pre-arrival alert
or
Patients in shock or with injury, requiring stabilization
or
	(
	    (eArrest.01 Cardiac Arrest is in (
	    3001003 ("Yes, Prior to Any EMS Arrival (includes EMS & Medical First Responders)"),
	    3001005 ("Yes, After Any EMS Arrival (includes Transport EMS & Medical First Responders)")
	    or

Patients who refused care/transport	(eAirway.10 Date/Time Decision to Manage the Patient with an Invasive Airway is not null is before eDisposition.25 Date/Time of Destination Prearrival Alert or Activation is not in (Null 7701001 ("Not Applicable"), 7701003 ("Not Recorded"))) or eProtocols.01 Protocols Used is 9914127 ("Medical-Hypotension/Shock (Non-Trauma)") or eSituation.02 Injury is 9922005 ("Yes") or eDisposition.28 Patient Evaluation/Care is in (4228003 ("Patient Evaluated and Refused Care"), 4228007 ("Patient Refused Evaluation/Care)) or eProtocols.01 Protocols Used is 9914189 ("General Refusal of Care")) or eVitals.04 ECG Type is 8801019 ("Refused"))

Numerator

Patients who received thrombolytics ≤ 30 minutes of EMS First Medical Contact	(eTimes.07 Arrived at Patient Date/Time is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded")) and (eOutcome.09 Emergency Department Procedures is

	(3E03017 "Introduction of Other Thrombolytic into Peripheral Vein, Open Approach...," 3E03317 "Introduction of Other Thrombolytic into peripheral Vein, Percutaneous Approach...," 3E04017 "Introduction of Other Thrombolytic into Central Vein, Open Approach...," 3E04317 "Introduction of Other Thrombolytic into Central Vein, Percutaneous Approach...") and eOutcome.19 Date/Time Emergency Department Procedure Performed is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded"))) and (eOutcome.19 Date/Time Emergency Department Procedure Performed MINUS eTimes.07 Arrived at Patient Date/Time (> 0 Minutes and <= 30 Minutes)))