

2025 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		(<u>ePatient.15 Age</u> is greater than or equal
from a 911 request		to 18
		and
		ePatient.16 Age Units is 2546009
		("Years"))
	and	
		(eSituation.11 Provider's Primary
		Impression
		matches\^ (I60)(I61) (I63) (G45) (G46)/
		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 a documented Last Known Well of greater than or equal to 24 hours prior to assessment or	((<u>eSituation.18 Date/Time Last</u> Known Well	
Patients in cardiac arrest or	is greater than or equal to 24 hours before <u>eVitals.01 Date/Time Vital Signs</u> Taken)	
Patient died prior to arrival to hospital	where (eSituation.18 Date/Time Last Known Well is not null and eVitals.01 Date/Time Vital Signs Taken is not null)) or eArrest.01 Cardiac Arrest is in (3001003 ("Yes, Prior to Any EMS Arrival (includes Transport EMS & Medical First Responders)"), 3001005 ("Yes, After Any EMS Arrival (includes Transport EMS & Medical First Responders)") or eDisposition.19 Final Patient Acuity is 4219909 ("Dead with Resuscitation Efforts (Black)")	
Exceptions: (Remove from denominate	or if present and numerator is not met)	
None	N/A	
Numerator Pre-arrival alert for stroke initiated during	eDisposition.24 Destination Team Pre-Arrival	
the EMS encounter	Alert or Activation is 4424015 ("Stroke")	

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

Percent of EMS patients aged 18 years and older transported from the scene with a primary or secondary impression of 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		(ePatient.15 Age is greater than or equal
from a 911 request		to 18
·		and
		ePatient.16 Age Units is 2546009
		("Years"))
	and	
		(eSituation.11 Provider's Primary
		<u>Impression</u>
		matches\^ (160)(161) (163) (G45) (G46)/
		or
		eSituation.12 Provider's Secondary
		Impressions matches\^ (160)(161) (163) (G45) (G46)/)
	and	
	۵۱۱۵	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
	and	Unit, with a Member of This Crew"))
	ana	eResponse.05 Type of Service Requested
		is in (
		2205001 ("Emergency Response (Primary
		Response Area)"),
		2205003 ("Emergency Response
		(Intercept)"),
		2205009 ("Emergency Response (Mutual
		Aid)")))
Denominator		

Data Elements for Calculation
ls Initial Population
tor)
(eSituation.18 Date/Time Last Known Well is greater than or equal to 24 hours
<u>before</u> <u>eVitals.01 Date/Time Vital Signs</u> <u>Taken)</u> where
(eSituation.18 Date/Time Last Known Well is not null and eVitals.01 Date/Time Vital Signs Taken is not null)
<u>)</u>
eArrest.01 Cardiac Arrest is in (3001003 ("Yes, Prior to Any EMS Arrival (includes Transport EMS & Medical First Responders)"), 3001005 ("Yes, After Any EMS Arrival (includes Transport EMS & Medical First Responders)")
eDisposition.19 Final Patient Acuity is 4219909 ("Dead with Resuscitation Efforts (Black)")
esent and numerator is not met)
ation.18 Date/Time Last Known Well is not 01 ("Not Applicable"),

AHAEMS3: Evaluation of Blood Glucose for Patients with Suspected Stroke

Percent 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	(<u>ePatient.15 Age</u> is greater than or equal
from a 911 request	to 18
	and
	ePatient.16 Age Units is 2546009
	("Years"))
	and
	(<u>eSituation.11 Provider's Primary</u>
	<u>Impression</u>
	matches\^ (I60)(I61) (I63) (G45) (G46)/
	or
	<u>eSituation.12 Provider's Secondary</u> Impressions
	matches\^ (160)(161) (163) (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"))
	eResponse.05 Type of Service Requested
	is in (
	2205001 ("Emergency Response (Primary
	Response Area)"),
	2205003 ("Emergency Response
	(Intercept)"),

	0005000 (#5
	2205009 ("Emergency Response (Mutual Aid)")))
Danamiantan	Ald))))
Denominator	
Include:	Data Elements for Calculation
Patients in the Initial Population	Equals Initial Population
Exclusions: (Always remove from deno	ominator)
Patients with a documented Last Known Well of greater than or equal to 24 hours	(
prior to assessment or	(<u>eSituation.18 Date/Time Last</u> <u>Known Well</u> is greater than or equal to 24 hours
Patients in cardiac arrest or	before <u>eVitals.01 Date/Time Vital Signs</u>
Patient died prior to arrival to hospital	<u>Taken</u>) where (eSituation.18 Date/Time Last
	Known Well is not null and
	<u>eVitals.01 Date/Time Vital Signs</u> <u>Taken</u> is not null)
)
	or <u>eArrest.01 Cardiac Arrest</u> is in (3001003 ("Yes, Prior to Any EMS Arrival (includes Transport EMS & Medical First Responders)"), 3001005 ("Yes, After Any EMS Arrival (includes Transport EMS & Medical First Responders)")
	or <u>eDisposition.19 Final Patient Acuity</u> is 4219909 ("Dead with Resuscitation Efforts (Black)"))
Exceptions: (Remove from denominat	or if present and numerator is not met)
None	N/A
Numerator	
Blood glucose evaluated during the EMS encounter	eVitals.18 Blood Glucose Level is not in (Null, 7701001 ("Not Applicable"),
	The state of the s

Note: Pertinent Negative (PN) of Unable to	7701003 ("Not Recorded"))
Complete (8801023) and Refused (8801019)	
are acceptable Numerator values.	

AHAEMS4: Stroke Screen Performed and Documented

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

Initial Patient Population	
Patients aged 18 years and older with a	(
suspected stroke transported from the scene	(<u>ePatient.15 Age</u> is greater than or equal
from a 911 request	to 18
	and
	ePatient.16 Age Units is 2546009
	("Years"))
	and
	(<u>eSituation.11 Provider's Primary</u>
	Impression
	matches\^ (I60)(I61) (I63) (G45) (G46)/
	or eSituation.12 Provider's Secondary
	Impressions
	matches\^ (160)(161) (163) (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 Areα)"),
	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 deno	minator)
Patients with a documented Last Known Well of greater than or equal to 24 hours prior to assessment	((eSituation.18 Date/Time Last
or Patients in cardiac arrest	Known Well is greater than or equal to 24 hours before
or Patient died prior to arrival to hospital	eVitals.01 Date/Time Vital Signs Taken) where
	(<u>eSituation.18 Date/Time Last</u> <u>Known Well</u> is not null and
	eVitals.01 Date/Time Vital Signs Taken is not null)
	or
	eArrest.01 Cardiac Arrest is in (3001003 ("Yes, Prior to Any EMS Arrival (includes Transport EMS & Medical First Responders)"), 3001005 ("Yes, After Any EMS Arrival (includes Transport EMS & Medical First Responders)") or
	eDisposition.19 Final Patient Acuity is 4219909 ("Dead with Resuscitation Efforts (Black)")
Exceptions: (Remove from denominate	or if present and numerator is not met)
None	N/A
Numerator	
Stroke screen performed and score (severity) documented	(<u>eVitals.30 Stroke Scale Type</u> is in (

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Note: Pertinent Negative (PN) of Refused
                                                     3330001 ("Cincinnati Prehospital Stroke
                                                     Scale (CPSS)"),
(8801019) and Unable to Complete (8801023)
                                                     3330004 ("Los Angeles prehospital Stroke
are acceptable values for stroke scale score.
                                                     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"))
                                              or
                                                     eVitals.29 Stroke Scale Score is in (
                                                     8801019 ("Refused")
                                                     8801023 ("Unable to Complete")))
                                              )
```

AHAEMS5: 12-Lead ECG Performed within 10 Minutes

Percent of EMS patients aged 18 years and older transported from the scene with a primary impression chest pain or a suspected MI for whom a 12-Lead ECG was performed within 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 (ePatient.15 Age is greater than or equal scene from a 911 request to 18 Note: chest pain or suspected MI is defined and ePatient.16 Age Units is 2546009 as: ("Years")) Angina pectoris, unspecified and Acute myocardial infarction eSituation.11 Provider's Primary Cardiac arrhythmia, unspecified Impression matches\^ Acute respiratory distress syndrome (120.9)[(121)](149.9)[(J80)](J81.0)[Acute pulmonary edema R06.00|R06.02|(R07.9)|(R11)|(R55)/ Dyspnea, unspecified and Shortness of breath eDisposition.30 Transport Disposition is in Chest pain, unspecified 4230001 ("Transport by This EMS Unit Nausea and vomiting (This Crew Only)"), Syncope and collapse 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 Areα)"), 2205003 ("Emergency Response (Intercept)"), 2205009 ("Emergency Response (Mutual

Denominator		
Include:	Data Elements for Calculation	
Patients in the initial population with a 12-	Initial Patient Population	
lead ECG performed during the EMS	and	
encounter	<u>eVitals.04 ECG Type</u> 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)		

Aid)")))

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Patients in cardiac arrest
                                               (
or
                                                      (eArrest.01 Cardiac Arrest is in (
Patients requiring advanced airway
                                                      3001003 ("Yes, Prior to Any EMS Arrival
management or non-invasive (CPAP/BiPAP)
                                                      (includes EMS & Medical First
prior to ECG
                                                      Responders)"),
                                                      3001005 ("Yes, After Any EMS Arrival
or
Patients in shock, respiratory arrest, or with
                                                      (includes Transport EMS & Medical First
                                                      Responders)")
injury, or requiring stabilization
                                               or
Patients who refuse care
                                                      ((eAirway.10 Date/Time Decision to
                                                      Manage the Patient with an Invasive
or
First ECG performed is not STEMI-positive
                                                      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 bu
                                                      eVitals.01 Date/Time Vital Signs Taken))
                                               or
                                                      Medical Device Type is in (
                                                      1603037 ("Ventilator Assistance-BiPAP"),
                                                      1603039 ("Ventilator Assistance-CPAP"))
                                               or
                                                      eProtocols.01 Protocols Used is in (
                                                      9914127 ("Medical-Hypotension/Shock
                                                      (Non-Trauma)"),
                                                      9914139 ("Medical-Respiratory
                                                      Distress/Asthma/COPD/Reactive Airway"))
                                               or
                                                      eSituation.02 Injury is 9922005 ("Yes")
                                               or
                                                      eDisposition.28 Patient Evaluation/Care is
                                                      in
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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")
                                              or (
                                                      first (eVitals.03 Cardiac
                                                      Rhythm/Electrocardiography (ECG) is
                                                      not in (
                                                      9901051 ("STEMI Anterior Ischemia""),
                                                      9901053 ("STEMI Inferior Ischemia""),
                                                      9901055 ("STEMI Lateral Ischemia"),
                                                      9901057 ("STEMI Posterior Ischemia"),
                                                      9901058 ("STEMI Septal Ischemia"))
                                              where
                                                     eVitals.01 Date/Time Vital Signs Taken is
                                                     not null
                                              and
                                                     sorted by eVitals.01 Date/Time Vital Signs
                                                     Taken))
                                              )
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
```

and (eTimes.07 Arrived at Patient Date/Time is not in (Null, 7701001 ("Not Applicable"), 7701003 ("Not Recorded")) eVitals.01 Date/Time Vital Signs Taken MINUS eTimes.07 Arrived at Patient Date/Time (> 0 Minutes and <= 10
	<u>Date/Time</u> (> 0 Minutes and <= 10 Minutes)))

AHAEMS6: Aspirin Administration for STEMI

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 (ePatient.15 Age is greater than or equal scene from a 911 request to 18 Note: chest pain or suspected MI is defined and ePatient.16 Age Units is 2546009 as: ("Years")) Angina pectoris, unspecified and Acute myocardial infarction eSituation.11 Provider's Primary Cardiac arrhythmia, unspecified Impression matches\^ Acute respiratory distress syndrome (120.9)(121)(149.9)(J80)(J81.0)Acute pulmonary edema R06.00|R06.02|(R07.9)|(R11)|(R55)/ Dyspnea, unspecified and Shortness of breath eDisposition.30 Transport Disposition is in Chest pain, unspecified 4230001 ("Transport by This EMS Unit Nausea and vomiting (This Crew Only)"), Syncope and collapse 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 deno	minator)
None	N/A
Exceptions: (Remove from denominate	r 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	((<u>eHistory.06 Medication Allergies</u> is 9924003 ("RXNORM"), 1191 ("Aspirin") or <u>eHistory.06 Medication Allergies</u> 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	(<u>eMedications.03 Medication</u> <u>Administered</u> is 1191 "Aspirin" or
	(eMedications.03 Medication Administered is 1191 "Aspirin" and eMedications.03 Medication Administered is 8801009 ("Medication Already Taken")))

AHAEMS6b: Aspirin Administration for Suspected Heart Attack

Percent of EMS patients aged 18 years and older transported from the scene with a primary impression of chest pain or a suspected heart attack 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 Note: chest pain or suspected MI is defined as:	((ePatient.15 Age is greater than or equal to 18 and ePatient.16 Age Units is 2546009
 Angina pectoris, unspecified Acute myocardial infarction Cardiac arrhythmia, unspecified Acute respiratory distress syndrome Acute pulmonary edema Dyspnea, unspecified Shortness of breath 	("Years")) and <u>eSituation.11 Provider's Primary</u> <u>Impression</u> matches\^ (120.9) (121) (149.9) (J80) (J81.0) R06.00 R06.02 (R07.9) (R11) (R55)/ and <u>eDisposition.30 Transport Disposition</u> is in (

 Chest pain, unspecified Nausea and vomiting Syncope and collapse 	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 Patient Population
Exclusions: (Always remove from deno	minator)
None	N/A
Exceptions: (Remove from denominate	or 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"))))

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 of STEMI within 10 Minutes of Positive ECG

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

Initial Patient Population Patients aged 18 years and older with chest (pain or suspected MI transported from the (ePatient.15 Age is greater than or equal to 18 scene from a 911 request Note: chest pain or suspected MI is defined and ePatient.16 Age Units is 2546009 as: ("Years")) Angina pectoris, unspecified and Acute myocardial infarction eSituation.11 Provider's Primary Cardiac arrhythmia, unspecified Impression matches\^ Acute respiratory distress syndrome (120.9)(121)(149.9)(J80)(J81.0)Acute pulmonary edema R06.00|R06.02|(R07.9)|(R11)|(R55)/ Dyspnea, unspecified and Shortness of breath eDisposition.30 Transport Disposition is in Chest pain, unspecified 4230001 ("Transport by This EMS Unit Nausea and vomiting (This Crew Only)"), Syncope and collapse 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 Areα)"),
2205003 ("Emergency Response
(Intercept)"),
2205009 ("Emergency Response (Mutual
Aid)")))

	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 deno	minator)
None	N/A
Exceptions: (Remove from denominate	or if present and numerator is not met)

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

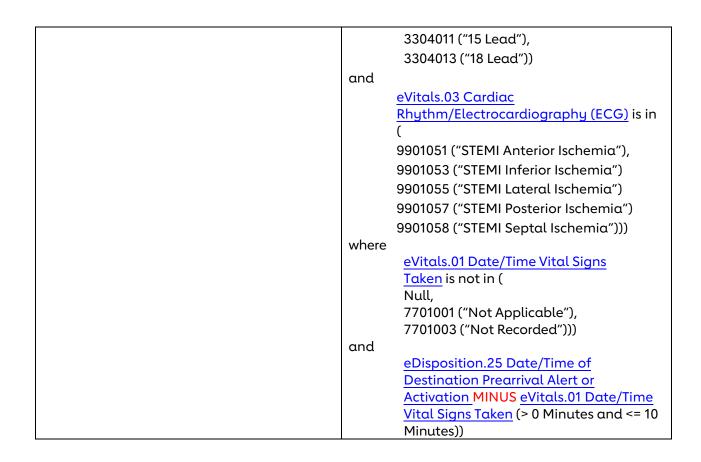
(

Patients in cardiac arrest

or (<u>eArrest.01 Cardiac Arrest</u> is in (

Patients requiring advanced airway 3001003 ("Yes, Prior to Any EMS Arrival management or non-invasive (CPAP/BiPAP) (includes EMS & Medical First prior to ECG Responders)"), 3001005 ("Yes, After Any EMS Arrival Patients in shock, respiratory arrest, or with (includes Transport EMS & Medical First injury, or requiring stabilization Responders)") or Patients refused care ((eAirway.10 Date/Time Decision to Manage the Patient with an Invasive First ECG performed is not STEMI-positive 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 Medical Device Type is in (1603037 ("Ventilator Assistance-BiPAP"), 1603039 ("Ventilator Assistance-CPAP")) or eProtocols.01 Protocols Used is in (9914127 ("Medical-Hypotension/Shock (Non-Trauma)"), 9914139 ("Medical-Respiratory Distress/Asthma/COPD/Reactive Airway")) or eSituation.02 Injury is 9922005 ("Yes") or eDisposition.28 Patient Evaluation/Care is in (

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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")
                                               or (
                                                      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")))
                                               where
                                                      eVitals.01 Date/Time Vital Signs Taken is
                                                      not null
                                               and
                                                      sorted by eVitals.01 Date/Time Vital Signs
                                                      Taken))
Numerator
Pre-arrival STEMI notification activated
                                               (
within 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.VitalsGroup exists where (
                                                (
                                                       first (eVitals.04 ECG Type is in (
                                                       3304007 ("12 Lead-Left Sided (Normal)"),
                                                       3304009 ("12 Lead-Right Sided"),
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AHAEMS8: EMS FMC to Primary PCI within 90 Minutes for Patients with STEMI

Percent of EMS patients aged 18 years and older transported to a STEMI receiving center with an EMS first medical contact to primary percutaneous coronary intervention (PPCI) time of less than or equal to 90 minutes or EMS first medical contact to PPCI time of less than or equal to 120 minutes when transport time is greater than or equal to 45 minutes and door to PPCI is within 30 minutes.

Initial Patient Population	
Patients aged 18 years and older with a	(
prehospital STEMI positive ECG who were	(<u>ePatient.15 Age</u> is greater than or equal
directly transported to a STEMI receiving	to 18
center by EMS	and

	ePatient.16 Age Units is 2546009
	("Years"))
	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
	<u>eDisposition.30 Transport Disposition</u> is in (
	4230001 ("Transport by This EMS Unit
	(This Crew Only)"),
	4230003 ("Transport by This EMS Unit,
	with α 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-PCI
	Capable")))
Denominator	
Include:	Data Elements for Calculation
Patients in the Initial Population who	Initial Population
received PCI	and
	eOutcome.09 Emergency Department
	<u>Pocedures</u> is (

	Reference ICD10PCS codes from PCI code list)
Exclusions: (Always remove from den	
None	N/A
	· ·
	tor if present and numerator is not met)
Patients in cardiac arrest	(c.A.wast 01 Canding Arest in in (
Or	(<u>eArrest.01 Cardiac Arrest</u> is in (3001003 ("Yes, Prior to Any EMS Arrival
Patients requiring advanced airway management or non-invasive (CPAP/BiPAP)	(includes EMS & Medical First
prior to ECG	Responders)"),
or	3001005 ("Yes, After Any EMS Arrival
Patients in shock, respiratory arrest, or with	(includes Transport EMS & Medical First
injury, or requiring stabilization	Responders)")
or	or
Patients refused care	((eAirway.10 Date/Time Decision to
or	Manage the Patient with an Invasive
First ECG performed is not STEMI-positive	Airway is not null
or	is before
Documented non-system scene delay	first (<u>eVitals.04 ECG Type</u> is in (
	3304007 ("12 Lead-Left Sided (Normal)"),
	3304009 ("12 Lead-Right Sided"),
	3304011 ("15 Lead"),
	3304013 ("18 Lead")))
	where
	(<u>eVitals.01 Date/Time Vital Signs Taken</u> is
	not null
	sorted by
	<u>eVitals.01 Date/Time Vital Signs Taken</u>))
	or
	or Medical Device Type is in (
	1603037 ("Ventilator Assistance-BiPAP"),
	1603039 ("Ventilator Assistance-CPAP"))
	or
	eProtocols.01 Protocols Used is in (
	9914127 ("Medical-Hypotension/Shock
	(Non-Trauma)"),
	9914139 ("Medical-Respiratory
	Distress/Asthma/COPD/Reactive Airway"))

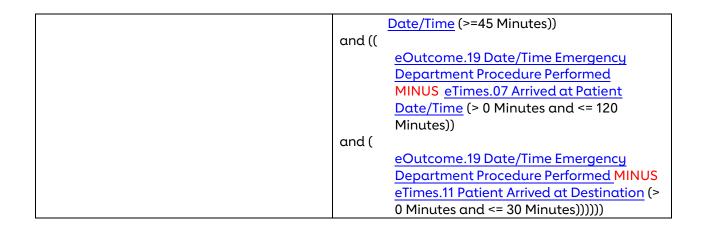
```
or
       eSituation.02 Injury is 9922005 ("Yes")
or
       eDisposition.28 Patient Evaluation/Care is
       4228003 ("Patient Evaluated and Refused
       Care"), 4228007 ("Patient Refused
       Evaluation/Care))
or
       eProtocols.01 Protocols Used is 9914189
       ("General Refusal of Care"))
or
       eVitals.04 ECG Type is 8801019 ("Refused")
or (
        first (eVitals.04 ECG Type is not 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
and
       sorted by eVitals.01 Date/Time Vital Signs
       Taken))
or
       eResponse.10 Type of Scene Delay is in (
       2210005 ("Crowd"),
       2210011 ("Extrication"),
       2210013 ("HazMat"),
       2210021 ("Patient Access"),
       2210032 ("Safety-Crew/Staging"),
       2210025 ("Safety-Patient"),
       2210031 ("Triage/Multiple Patients"),
       2210037 ("Weather"))
```

Numerator

Patients who received primary PCI within 90 minutes of EMS First Medical Contact or Who had an EMS transport time of greater than or equal to 45 minutes AND

- Who received a primary PCI within 120 minutes of EMS First Medical Contact AND
- Within 30 minutes of arrival at the Receiving Center

```
eTimes.07 Arrived at Patient Date/Time
        is not in
        (
        Null,
        7701001 ("Not Applicable"),
        7701003 ("Not Recorded"))
and
       eTimes.09 Unit Left Scene Date/Time is not
       in (
       Null,
       7701001 ("Not Applicable"),
       7701003 ("Not Recorded"))
and
       eTimes.11 Patient Arrived at Destination
       Date/Time is not in (
       Null,
       7701001 ("Not Applicable"),
       7701003 ("Not Recorded"))
and
(
        eOutcome.09 Emergency Department
        Procedures is
        Reference ICD10PCS codes from PCI
        code list)
 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))
or ((
       eTimes.11 Patient Arrived at Destination
       MINUS eTimes.09 Unit Left Scene
```



AHAEMS9: EMS FMC to Thrombolytic Administration within 60 Minutes for Patients with STEMI

Percent of EMS patients aged 18 years and older treated and directly transported to a STEMI referring center with an EMS first medical contact to thrombolytic time of less than or equal to 60 minutes.

Initial Patient Population	
Patients aged 18 years and older with a prehospital STEMI positive ECG who were directly transported to a STEMI receiving	((ePatient.15 Age is greater than or equal to 18
center by EMS	and ePatient.16 Age Units is 2546009 ("Years"))
	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
	<u>eDisposition.30 Transport Disposition</u> 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-PCI Capable")))
Denominator	, , , , , ,
Denominator Include:	Data Elements for Calculation
	·
Patients in the Initial Population who received thrombolytics	Data Elements for Calculation 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")
Include: Patients in the Initial Population who	Data Elements for Calculation 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")

Exceptions: (Remove from denominator if present and numerator is not met) Patients in cardiac arrest (eArrest.01 Cardiac Arrest is in (Patients requiring advanced airway 3001003 ("Yes, Prior to Any EMS Arrival management or non-invasive (CPAP/BiPAP) (includes EMS & Medical First prior to ECG Responders)"), 3001005 ("Yes, After Any EMS Arrival or (includes Transport EMS & Medical First Patients in shock, respiratory arrest, or with injury, or requiring stabilization Responders)") or Patients refused care ((eAirway.10 Date/Time Decision to Manage the Patient with an Invasive First ECG performed is not STEMI-positive Airway is not null is before Documented non-system scene delay 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 Medical Device Type is in (1603037 ("Ventilator Assistance-BiPAP"), 1603039 ("Ventilator Assistance-CPAP")) or eProtocols.01 Protocols Used is in (9914127 ("Medical-Hypotension/Shock (Non-Trauma)"), 9914139 ("Medical-Respiratory Distress/Asthma/COPD/Reactive Airway")) or eSituation.02 Injury is 9922005 ("Yes") or eDisposition.28 Patient Evaluation/Care is

```
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")
                                             or (
                                                      first (eVitals.04 ECG Type is not 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
                                              and
                                                     sorted by eVitals.01 Date/Time Vital Signs
                                                     Taken))
                                              or
                                                     eResponse.10 Type of Scene Delay is in (
                                                     2210005 ("Crowd"),
                                                     2210011 ("Extrication"),
                                                     2210013 ("HazMat"),
                                                     2210021 ("Patient Access"),
                                                     2210032 ("Safety-Crew/Staging"),
                                                     2210025 ("Safety-Patient"),
                                                     2210031 ("Triage/Multiple Patients"),
                                                     2210037 ("Weather"))
Numerator
Patients who received thrombolytics
                                              (
within 60 minutes of EMS first medical
                                                      eTimes.07 Arrived at Patient Date/Time
                                                      is not in
contact
                                                      (
                                                      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
       Thrombolutic 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
        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 <= 60
        Minutes)))
```

AHAEMS10: EMS FMC to Thrombolytic Administration within 90 minutes for Patients with Stroke

Percent of patients treated and directly transported to destination hospital with an EMS first medical contact to thrombolytic administration time of less than or equal to 90 minutes.

Initial Patient Population		
Patients aged 18 years and older with a	(
suspected stroke transported to the		(ePatient.15 Age is greater than or equal
emergency department from the scene from		to 18
a 911 request		and
		ePatient.16 Age Units is 2546009
		("Years"))
	and	
		(<u>eSituation.11 Provider's Primary</u>
		Impression
		matches\^ (160)(161) (163) (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)")
	and	
		eDisposition.21 Type of Destination is in
		(
		4221003 ("Hospital – Emergency
		Department"),
		4221023 ("Freestanding Emergency Department"))))
Denominator		Department JJJJ
Denominator		
Include:		Data Elements for Calculation

Patients in the Initial Population who Initial Population received thrombolytics 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 Thrombolutic into Central Vein, Open Approach...," 3E04317 "Introduction of Other Thrombolytic into Central Vein, Percutaneous Approach...") Exclusions: (Always remove from denominator) None Exceptions: (Remove from denominator if present and numerator is not met) Documented EMS reasons for delay (patient in cardiac arrest, airway eArrest.01 Cardiac Arrest is in (management required) 3001003 ("Yes, Prior to Any EMS Arrival (includes Transport EMS & Medical First Documented non-system reasons for Responders)"), delay (Scene delays: crowd, extrication, 3001005 ("Yes, After Any EMS Arrival hazmat, safety, triage/multiple patients) (includes Transport EMS & Medical First Responders)") Patients who refused care or eAirway.10 Date/Time Decision to Manage the Patient with an Invasive Airway is not in Null or eResponse.10 Type of Scene Delay is in (2210005 ("Crowd"), 2210011 ("Extrication"), 2210013 ("HazMat"), 2210023 ("Safety-Crew Staging"), 2210025 ("Safety-Patient"),

```
2210031 ("Triage/Multiple Patients"))
                                           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
                                            (
within 90 minutes of EMS first medical
                                                    eTimes.07 Arrived at Patient Date/Time
contact
                                                    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,
```



AHAEMS11: EMS FMC to Endovascular Therapy within 120 Minutes for Patients with Stroke

Percent of EMS patients aged 18 years and older transported to a comprehensive stroke center or thrombectomy capable stroke center with an EMS first medical contact to endovascular therapy time of less than or equal to 120 minutes; or EMS first medical contact to endovascular therapy time of less than or equal to 150 minutes when transport time is greater than or equal to 45 minutes and door to EVT is within 30 minutes.

Initial Patient Population		
Patients aged 18 years and older with a	(
suspected stroke transported to the		(<u>ePatient.15 Age</u> is greater than or equal
emergency department from the scene from		to 18
a 911 request		and
		<u>ePatient.16 Age Units</u> is 2546009
		("Years"))
	and	
		(<u>eSituation.11 Provider's Primary</u>
		<u>Impression</u>
		matches\^ (160)(161) (163) (G45) (G46)/
		or
		eSituation.12 Provider's Secondary
		<u>Impressions</u> matches\^ (I60)(I61) (I63) (G45) (G46)/)
	and	
		<u>eDisposition.30 Transport Disposition</u> 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.21 Type of Destination is in (4221003 ("Hospital – Emergency Department"), 4221023 ("Freestanding Emergency Department"))))
Denominator	·
Include:	Data Elements for Calculation
Patients in the Initial Population who received endovascular therapy	Initial Population and
	eOutcome.09 Emergency Department Procedures is
	03CG3Z7 "Extirpation of matter from intracranial artery using stent retriever, percutaneous approach," 03CG3ZZ "Extirpation of matter from intracranial artery, percutaneous approach," 03CP3Z7 "Extirpation of matter from right verbal artery using stent retriever, percutaneous approach,"

03CQ3Z7 "Extirpation of matter from left vertebral artery using stent retriever, percutaneous approach...,"
03CQ3ZZ "Extirpation of matter from left vertebral artery, percutaneous approach...,"
B31R1ZZ "Fluoroscopy of intracranial arteries using low osmolar contrast...,"
B31RYZZ "Fluoroscopy of intracranial arteries using other contrast...")

Exclusions: (Always remove from denominator)

None N/A

Exceptions: (Remove from denominator if present and numerator is not met) Documented EMS reasons for delay (

Documented EMS reasons for delay (patient in cardiac arrest, airway management required)

or

Documented non-system reasons for delay (Scene delays: crowd, extrication, hazmat, safety, triage/multiple patients)

or

Patients who refused care

eArrest.01 Cardiac Arrest is in (
3001003 ("Yes, Prior to Any EMS Arrival
(includes Transport 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 in Null

or

eResponse.10 Type of Scene Delay is in (
2210005 ("Crowd"),
2210011 ("Extrication"),
2210013 ("HazMat"),
2210023 ("Safety-Crew Staging"),
2210025 ("Safety-Patient"),
2210031 ("Triage/Multiple Patients"))

or

<u>eDisposition.28 Patient Evaluation/Care</u> 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 endovascular within 120 minutes of EMS first medical contact or

Who had an EMS transport time of greater than or equal to 45 minutes AND

- Who received endovascular therapy within 150 minutes of EMS first medical contact AND
- Within 30 minutes of arrival at the Receiving Center

```
eTimes.07 Arrived at Patient Date/Time
        is not in
        (
        Null.
        7701001 ("Not Applicable"),
        7701003 ("Not Recorded"))
and
       eTimes.09 Unit Left Scene Date/Time is not
       in (
       Null,
       7701001 ("Not Applicable"),
       7701003 ("Not Recorded"))
and
       eTimes.11 Patient Arrived at Destination
       Date/Time is not in (
       Null,
       7701001 ("Not Applicable"),
       7701003 ("Not Recorded"))
 and
(
        eOutcome.09 Emergency Department
       Procedures is
       03CG3Z7 "Extirpation of matter from
       intracranial artery using stent retriever,
       percutaneous approach...,"
       03CG3ZZ "Extirpation of matter from
       intracranial artery, percutaneous
       approach...,"
```

```
03CP3Z7 "Extirpation of matter from right
       verbal artery using stent retriever,
       percutaneous approach...,"
       03CP3ZZ "Extirpation of matter from right
       vertebral artery, percutaneous
       approach...,"
       03CQ3Z7 "Extirpation of matter from left
       vertebral artery using stent retriever,
       percutaneous approach...,"
       03CQ3ZZ "Extirpation of matter from left
       vertebral artery, percutaneous
       approach...,"
       B31R1ZZ "Fluoroscopy of intracranial
       arteries using low osmolar contrast...,"
       B31RYZZ "Fluoroscopy of intracranial
       arteries using other contrast...")
 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 <= 120
        Minutes))
or ((
       eTimes.11 Patient Arrived at Destination
       MINUS eTimes.09 Unit Left Scene
       Date/Time (>=45 Minutes))
and ((
        eOutcome.19 Date/Time Emergency
        Department Procedure Performed
        MINUS eTimes.07 Arrived at Patient
        Date/Time (> 0 Minutes and <= 150
        Minutes))
and (
        eOutcome.19 Date/Time Emergency
        Department Procedure Performed MINUS
        eTimes.11 Patient Arrived at Destination (>
```

0 Minutes and <= 30 Minutes))))))	