



دائرة الصحة
DEPARTMENT OF HEALTH

Pre-Hospital Emergency Medical Service (EMS) – JAWDA Guidance

Version 2.0

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Executive Summary

The Department of Health– Abu Dhabi (DOH) is the regulatory body of the healthcare sector in the Emirate of Abu Dhabi and ensures excellence in healthcare for the community by monitoring the health status of its population.

The Emirate of Abu Dhabi is experiencing a substantial growth in the number of hospitals, centers and clinics. This ranges from school clinics and mobile units to internationally renowned specialists and tertiary academic centers. Although access and quality of care have improved dramatically over the last couple of decades, mirroring the economic upturn and population boom of the Abu Dhabi Emirate, challenges remain in addressing further improvements.

The primary challenges include an increasingly dynamic and aging population with an increased expectation for treatment, utilization of technology and diverse workforce leading to increased complexity of healthcare provision in Abu Dhabi. All of this results in an increased and inherent risk to quality and patient safety.

DOH has developed a dynamic and comprehensive quality framework to foster improvements across the health sector. This guidance relates to the quality indicators DOH is mandating and the routine monitoring and reporting by DoH-licensed emergency medical service (EMS) providers in Abu Dhabi.

The guidance sets out the full definition and method of calculation for patient safety-related and prehospital process performance indicators. For enquiries about this guidance, please contact jawda@doh.gov.ae

This document is subject to review and therefore it is advisable to utilize online versions available on the DOH website at all times.

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Effective From: Q1-2027

About This Guidance

This guidance sets out the definitions, reporting requirements, and frequency of JAWDA Pre-Hospital Emergency Medical Services (EMS) performance indicators. The Department of Health (DoH), in consultation with local and international EMS expertise, developed these indicators to assess the timeliness, consistency, and documentation of key prehospital processes and system activations within the scope of EMS practice.

The indicators in this guidance measure process and outcome-based performance, including response times, patient assessment and documentation, timely initiation of transport, activation of designated pathways, and delivery of essential prehospital interventions. These indicators are designed to be objective, auditable, and within EMS operational control, and do not assess diagnostic accuracy, clinical appropriateness of treatment decisions, or patient outcomes beyond the prehospital phase.

For performance measurement purposes, KPI inclusion is based on documented patient presentations, system timestamps, and recorded EMS actions, as defined in each indicator. Absence of documentation is interpreted as non-compliance with documentation requirements. This guidance applies to all DoH-licensed emergency medical service providers (public and private) in the Emirate of Abu Dhabi and forms part of the Department's wider quality and patient safety framework.

Each KPI submission should include raw numerator, denominator, exclusion count by category, exclusion rate, invalid or missing timestamp count, and raw case volume. Exclusions should be auditable using structured ePCR, dispatch, UMOC, device, or operational data fields. Routine KPI calculation should not depend on hospital final diagnosis or ICD data.

The classification of Urban and Rural areas as defined by the Department of Municipalities and Transport can be explained more clearly for better understanding. Urban areas include the Urban (High Density), Urban Area, and Suburban category, which together represent the more densely developed and infrastructure-intensive regions. In contrast, Rural areas include the Rural category, which represents less densely populated and more open or countryside regions. This separation helps provide a clearer and more structured understanding of how different geographical areas are categorized within the framework.

Who is this guidance for?

All DoH licensed ambulance service providers (public & private) in the Emirate of Abu Dhabi

How do I follow this guidance?

Each provider will nominate one member of staff to coordinate, collect, monitor and report waiting time quality performance indicators data as per communicated dates. The nominated healthcare provider lead must in the first instance e-mail their contact details (if different from previous submission) to jawda@doh.gov.ae and submit the required quarterly quality performance indicators through Jawda online portal.

What regulations are related to this guidance?

- Legislation establishing the Health Sector
- [DoH Policy for Quality and Patient Safety](#) As per DoH Policy for Quality and Patient Safety issued April 2026, this guidance applies to all DoH-licensed emergency medical service providers in the Emirate of Abu Dhabi in accordance with the requirements set out in this Standard.
- [Policy for Integrated Continuum of Pre-hospital and ED Care for Time Critical Conditions](#)

DoH Standards Followed in this Document

- Standard for EMS and Ambulance Services
- Special Pathway Program Standards

Glossary

Acute Coronary Syndrome (ACS): Refers to a group of clinical presentations resulting from suspected acute myocardial ischemia and includes conditions such as unstable angina and acute myocardial infarction (STEMI and NSTEMI). In the prehospital EMS setting, ACS is identified based on patient presentation, typically characterized by one or more symptoms suggestive of myocardial ischemia, such as chest pain or discomfort, pain radiating to the arm, neck, jaw, back, or epigastrium, shortness of breath, diaphoresis, nausea/vomiting, dizziness, or unexplained fatigue.

For the purposes of EMS assessment and performance measurement, ACS denotes a suspected ischemic cardiac presentation and does not require ECG confirmation or hospital diagnosis.

Arrival-at-Scene Time: Refers to the first documented on-scene timestamp recorded by the responding ambulance unit.

Criteria-met SPP Case: A patient presentation meeting the DoH-defined Special Program Pathway activation criteria, regardless of whether pathway activation was completed.

Defibrillation: The delivery of an electrical shock using a defibrillation device by EMS personnel, as documented in the electronic patient care report or device data.

First Qualifying EMS Unit: The first DoH-licensed EMS ambulance/resource assigned to the incident and eligible for the relevant KPI calculation. Where multiple units attend, the calculation hierarchy must be defined in the data dictionary.

Emergency Medical Services (EMS): DoH-licensed ambulance service providers responsible for the prehospital assessment, initial treatment, stabilization, and transport of patients with medical or traumatic emergencies, including coordination through dispatch systems and documentation via electronic patient care reports.

Life/limb-threatening External Hemorrhage: External bleeding that is uncontrolled, arterial/pulsatile, associated with traumatic amputation, significant pooling, junctional bleeding, shock, or requires tourniquet, wound packing, hemostatic dressing, or equivalent bleeding-control intervention.

Moderate/Severe Pain: Pain score $\geq 4/10$ using a numeric scale, or documented moderate/severe pain using an age-appropriate verbal, behavioral, or observational pain scale.

Pain Assessment: The documentation of a pain evaluation using a numeric, verbal, or observational pain scale, as applicable to the patient's condition and level of consciousness.

Patient Contact: Is confirmed when EMS personnel make physical contact or clinical assessment of the patient at the scene.

Patient-side arrival time: The first documented time EMS personnel reach the patient and are able to commence clinical assessment; this may differ from ambulance arrival-at-scene time.

Prehospital Cardiac Arrest: Refers to cardiac arrest occurring outside a healthcare facility, regardless of whether the collapse was witnessed.

Return of Spontaneous Circulation (ROSC): The restoration of a palpable pulse with signs of circulation, at any time while under EMS care prior to arrival at the receiving healthcare facility.

Scene departure / transport initiation time: The timestamp at which the transporting ambulance physically departs the incident scene with the patient.

Special Program Pathway (SPP): Components of the healthcare system required to manage time-critical healthcare emergencies and that require specific training, equipment, and availability. Systems to manage these must be highly reliable, always available 24/7, and optimized for each patient.

Suspected Acute Stroke: A presentation with documented focal neurological deficit, positive BEFAST/FAST element, dispatch stroke impression, clinician suspicion of stroke, or stroke pathway activation. Non-specific symptoms alone should not define stroke-suggestive inclusion.

Sustained ROSC: Return of palpable pulse with signs of circulation that remains present for a defined reporting interval or at receiving-facility handover.

Time of Call Receipt: Refers to the official system-generated timestamp when the call is first received by the Emergency Operations / Dispatch Center.

Unified Medical Operation Command (UMOC): DoH operations center run by EPAR that monitors, facilitates, and optimizes healthcare emergencies in Abu Dhabi.

Valid Exclusion: A predefined exclusion criterion recorded using a structured field and supported by clinical or operational documentation. All exclusions must be reported separately by category.

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS001

KPI Description (title):	Percentage of Urban Ambulance Responses Arriving at Scene ≤7 Minutes
Domain	Timeliness of care
Indicator Type	Process
Definition:	Percentage (%) of ambulance responses in urban areas that arrived at the scene ≤ 7 minutes, from the official first emergency call receipt timestamp to the first qualifying EMS ambulance arrival-at-scene timestamp. <i>Refer to Appendix II for the list of Urban Areas per Department of Municipalities & Transport</i>
Calculation:	Numerator: Number of eligible EMS emergency responses that were dispatched to urban locations during the reporting period in which the responding ambulance unit records an arrival-at-scene time of ≤ 7 minutes, measured from the timestamp of call receipt by the Emergency Operations / Dispatch Center. Numerator Guidance: include in the numerator count regardless whether: • Direct patient contact is achieved • No-patient-found • Unable-to-locate, access delay Denominator: Total number of eligible EMS emergency responses that were dispatched to urban locations during the reporting period. Denominator Exclusion: • Interfacility transfer e.g., clinic to hospital or hospital to hospital. • Calls canceled prior to the arrival of the ambulance, by the patient, dispatch, police, or other government entity.
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage (<i>minutes</i> , for mean, median and min. & max)
International comparison if available	Ambulance Systems Indicators (AmbSYS) - NHS England Digital Local regulatory threshold informed by baseline performance, clinical importance, data reliability, and implementation feasibility. This target is not presented as an international benchmark unless explicitly stated.
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS002

KPI Description (title):	Percentage of Rural Ambulance Responses Arriving ≤15 Minutes
Domain	Timeliness of care
Indicator Type	Process
Definition:	Percentage (%) of ambulance responses in rural areas that arrived at the scene ≤ 15 minutes, from the official first emergency call receipt timestamp to the first qualifying EMS ambulance arrival-at-scene timestamp. <i>Refer to Appendix II for the list of Rural Areas per Department of Municipalities & Transport</i>
Calculation:	Numerator: Number of eligible EMS emergency responses that were dispatched to rural locations during the reporting period in which the responding ambulance unit records an arrival-at-scene time of ≤ 15 minutes, measured from the timestamp of call receipt by the Emergency Operations / Dispatch Center. Numerator Guidance: include in the numerator count regardless whether: • Direct patient contact is achieved • No-patient-found • Unable-to-locate, access delay Denominator: Total number of eligible EMS emergency responses that were dispatched to rural locations during the reporting period. Denominator Exclusion: • Interfacility transfer e.g., clinic to hospital or hospital to hospital. • Calls canceled prior to the arrival of the ambulance, by the patient, dispatch, police, or other government entity.
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage (<i>minutes</i> , for mean, median and min. & max).
International comparison if available	Ambulance Systems Indicators (AmbSYS) - NHS England Digital Local regulatory threshold informed by baseline performance, clinical importance, data reliability, and implementation feasibility. This target is not presented as an international benchmark unless explicitly stated.
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS003

KPI Description (title):	Percentage of Unified Medical Operation Command (UMOC) Activation for STEMI, Stroke, Burn, Trauma Special Program Pathway (SPP) Cases
Domain	Effectiveness of care
Indicator Type	Process
Definition:	Percentage of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for STEMI, Stroke, Burn, Trauma, for whom a Unified Medical Operation Command (UMOC) activation was initiated by EMS prior to the commencement of ambulance transport.
Calculation:	Numerator: Total number of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for STEMI, Stroke, Burn, Trauma who were transported by EMS during the reporting period for whom UMOC activation was initiated and documented by EMS prior to the initiation of ambulance transport. Denominator: Total number of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for STEMI, Stroke, Burn, Trauma who were transported by EMS during the reporting period (regardless of whether UMOC activation was completed) Exclusion: • Interfacility transfer e.g., clinic to hospital or hospital to hospital. • Calls canceled prior to the arrival of the ambulance by patient, dispatch, police, or other government entity.
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	<i>Subject Matter Expert Recommendation</i>
Target	≥90%
Data Source/ Report Name:	Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS004

KPI Description (title):	Percentage of Patients with Acute Coronary Syndrome (ACS) Administered Aspirin Prior to Hospital Arrival
Domain	Effectiveness of care
Indicator Type	Process
Definition:	Percentage of patients aged ≥ 16 years assessed and transported by EMS with documented clinical suspicion of Acute Coronary Syndrome (ACS) who were administered aspirin prior to arrival at the receiving healthcare facility.
Calculation:	Numerator: Number of patients with documented clinical suspicion of Acute Coronary Syndrome (ACS) who were administered aspirin by EMS prior to arrival at the receiving healthcare facility. Denominator: Total number of patients ≥ 16 years at the time of the event, with documented clinical suspicion of Acute Coronary Syndrome (ACS), who were transported by EMS during the reporting period. Denominator Guidance: Patients shall be included in the denominator where there is documented clinical suspicion of Acute Coronary Syndrome (ACS) at the time of EMS assessment, evidenced by one or more documented symptoms or clinical findings consistent with myocardial ischemia in the electronic patient care report. Eligible presentations include, where ACS is suspected and documented: • Chest pain or discomfort (e.g., pressure, tightness, burning, or aching) • Pain or discomfort radiating to the neck, jaw, shoulders, arms, back, or epigastrium • Shortness of breath • Dizziness or lightheadedness • Nausea and/or vomiting • Diaphoresis (sweating) Isolated non-specific symptoms shall not be sufficient for inclusion unless accompanied by documented clinical suspicion of ACS. Denominator Exclusions: • Patients with documented contraindications to aspirin, including true allergy/anaphylaxis, active bleeding, or other protocol-defined contraindication. • Patients who refused aspirin administration.

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

	• Patients with potential aspiration risk (e.g., unconsciousness) or another specific contraindication. • Patients unable to safely tolerate oral medication due to severe respiratory distress or aspiration risk. • Patients who already took Aspirin 300 mg (self-administration, given by other facility, etc.).
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	2025 ACC/AHA/ACEP/NAEMSP/SCAI Guideline for the Management of Patients With Acute Coronary Syndromes: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines Circulation Local regulatory threshold informed by baseline performance, clinical importance, data reliability, and implementation feasibility. This target is not presented as an international benchmark unless explicitly stated.
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS005

KPI Description (title):	Percentage of ACS-Suggestive Patients Receiving 12-Lead ECG ≤10 Minutes
Domain	Effectiveness of Care
Indicator Type	Process
Definition:	Percentage of patients with documented clinical suspicion of Acute Coronary Syndrome (ACS) for whom a 12-lead electrocardiogram (ECG) was performed within 10 minutes of documented patient-side arrival time.
Calculation:	Numerator: Number of patients with documented clinical suspicion of Acute Coronary Syndrome (ACS) for whom a 12-lead ECG was performed and documented by EMS ≤10 minutes from documented patient-side arrival time. Denominator: Total number of patients with documented clinical suspicion of Acute Coronary Syndrome (ACS) who were assessed and transported by EMS during the reporting period. Denominator Guidance: Patients shall be included in the denominator where there is documented clinical suspicion of Acute Coronary Syndrome (ACS) at the time of EMS assessment, evidenced by one or more documented symptoms or clinical findings consistent with myocardial ischemia in the electronic patient care report. Eligible presentations include, where ACS is suspected and documented: • Chest pain or discomfort (e.g., pressure, tightness, burning, or aching) • Pain or discomfort radiating to the neck, jaw, shoulders, arms, back, or epigastrium • Shortness of breath • Dizziness or lightheadedness • Nausea and/or vomiting • Diaphoresis (sweating) Isolated non-specific symptoms shall not be sufficient for inclusion unless accompanied by documented clinical suspicion of ACS. Denominator Exclusions: • Patient / legal guardian with documented refusal to perform ECG. • Cases requiring immediate life-saving interventions that preclude ECG acquisition prior to transport (as documented)

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

	○ <u>Active cardiac or respiratory arrest</u> requiring immediate resuscitation (CPR, defibrillation, advanced airway). ○ <u>Severe airway compromise</u> requiring urgent airway management (e.g. inability to maintain airway, impending respiratory failure). ○ <u>Profound hypotension or shock</u> requiring immediate stabilization (e.g. IV access, fluid resuscitation, vasopressors where applicable). ○ <u>Life-threatening arrhythmias</u> requiring immediate intervention (e.g. unstable ventricular tachycardia). ○ <u>Uncontrolled external hemorrhage</u> requiring urgent bleeding control prior to transport. ○ <u>Altered level of consciousness</u> with inability to cooperate or safely apply ECG leads. ○ <u>Violent agitation or severe behavioral disturbance</u> posing immediate safety risk to patient or EMS crew. ○ <u>Entrapment or unsafe scene conditions</u> requiring rapid extrication and transport before full assessment. • Calls cancelled prior to ambulance arrival **Isolated non-specific symptoms should not trigger denominator inclusion unless ACS concern is documented.
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	2025 ACC/AHA/ACEP/NAEMSP/SCAI Guideline for the Management of Patients With Acute Coronary Syndromes: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines Circulation Local regulatory threshold informed by baseline performance, clinical importance, data reliability, and implementation feasibility. This target is not presented as an international benchmark unless explicitly stated.
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS006

KPI Description (title):	Percentage of ACS, STEMI, and Stroke Patients Departing Scene ≤15 Minutes
Domain	Timeliness of care
Indicator Type	Process
Definition:	Percentage of patients with documented clinical suspicion of Acute Coronary Syndrome (ACS), ST-Elevation Myocardial Infarction (STEMI), or acute stroke, for whom ambulance transport from the scene was initiated within 15 minutes of ambulance arrival at the scene.
Calculation:	Numerator: Number of patients with documented clinical suspicion of ACS, STEMI, or acute stroke who departed the scene (initiation of ambulance transport) ≤15 minutes from the documented ambulance arrival-at-scene time. Denominator: Total number of patients with documented clinical suspicion of ACS, STEMI, or acute stroke who were assessed and transported by EMS during the reporting period. Denominator Guidance: Patients shall be included in the denominator where there is documented clinical suspicion of ACS, STEMI, or acute stroke at the time of EMS assessment, supported by one or more documented symptoms or clinical findings consistent with myocardial ischemia or acute neurological deficit, and who were assessed and transported by EMS during the reporting period. <u>Stroke Presentations – BEFAST Enumeration</u> Patients shall be included under Stroke if they present with one or more of the following BEFAST findings, as documented in the electronic patient care report: B – Balance: Sudden loss of balance, coordination, or vertigo. E – Eyes: Sudden visual loss, double vision, or visual field deficit. F – Face: Facial droop or asymmetry. A – Arm: Arm or leg weakness, numbness, or drift. S – Speech: Slurred speech, difficulty speaking. T – Terrible sudden-onset headache & Time last-known-well / symptom onset. <u>ACS / STEMI Presentations</u> Patients shall be included under ACS/STEMI if they present with one or more symptoms suggestive of myocardial ischemia, including but not limited to:

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

	• Chest pain or discomfort (pressure, tightness, burning, or aching). • Pain radiating to the arm, neck, jaw, back, or epigastrium. • Shortness of breath. • Diaphoresis. • Nausea and/or vomiting. • Dizziness or lightheadedness. Denominator Exclusions: • Patients in cardiac arrest. • Interfacility transfer e.g., clinic to hospital or hospital to hospital. • Cases requiring advanced airway intervention or non-invasive ventilation prior to transport, where delay is clinically justified and documented. • Calls cancelled prior to ambulance arrival. • Challenges with access / extrication of the patient. <i>Note: This measure should not incentivise departure before completion of essential time-critical assessment, ECG/stroke screen/glucose measurement, destination decision, or pathway notification where clinically feasible.</i>
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	2025 ACC/AHA/ACEP/NAEMSP/SCAI Guideline for the Management of Patients With Acute Coronary Syndromes: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines Circulation Local regulatory threshold informed by baseline performance, clinical importance, data reliability, and implementation feasibility. This target is not presented as an international benchmark unless explicitly stated.
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS007

KPI Description (title):	Percentage of criteria-met SPP Trauma and Burns patients departing scene ≤ 10 Minutes
Domain	Timeliness of care
Indicator Type	Process
Definition:	Percentage of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for Trauma and Burn for whom ambulance transport (scene departure) was initiated ≤10 minutes of ambulance arrival at the scene.
Calculation:	Numerator: Number of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for Trauma and Burn who departed the scene (initiation of ambulance transport) ≤10 minutes from the documented ambulance arrival-at-scene time. Denominator: Total number of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for Trauma and Burn regardless of whether SPP activation was completed, who were assessed and transported by EMS during the reporting period. Denominator Exclusions: • Interfacility transfer e.g., clinic to hospital or hospital to hospital • Challenges with access / extrication of the patient • Situations where scene safety, accessibility, or hazards prevent immediate patient access or transport (as documented) • Calls cancelled prior to ambulance arrival
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	<i>Subject Matter Expert Recommendation</i>
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS008

KPI Description (title):	Percentage of Cardiac Arrest Patients Achieving at (ROSC) Prior to Hospital Arrival
Domain	Effectiveness of care
Indicator Type	Outcome
Definition:	Percentage of patients who experienced a prehospital cardiac arrest, including witnessed and unwitnessed cases who achieved documented ROSC while under EMS care prior to arrival at the receiving healthcare facility, with circulation maintained until transfer of care This intentionally includes both witnessed and unwitnessed prehospital cardiac arrests to ensure complete capture of resuscitation activity and avoid systematic exclusion of patients found collapsed prior to EMS arrival.
Calculation:	Numerator: Number of patients with prehospital cardiac arrest who achieved sustained Return of Spontaneous Circulation (ROSC) until handover at the receiving healthcare facility Numerator Guidance: Sustained ROSC should be confirmed by documented palpable pulse and/or organized electrical rhythm with signs of circulation, maintained until handover at the receiving healthcare facility, as evidenced by ePCR and/or monitor/defibrillator data. Denominator: Total number of patients with prehospital cardiac arrest who were attended by EMS during the reporting period, including patients found collapsed and unresponsive prior to EMS arrival (unwitnessed cardiac arrest) Denominator Guidance: Patients shall be included in the denominator if they meet prehospital cardiac arrest presentation, defined as: • Unresponsive patient. • Absence of signs of circulation (no palpable pulse or no effective breathing). • Cardiac arrest occurring prior to or after EMS arrival, including: ○ Witnessed cardiac arrest. ○ Unwitnessed cardiac arrest (patient found collapsed on EMS arrival). Denominator Exclusions: • Cases where resuscitation was commenced but was suspended based on termination of resuscitation criteria • Obvious death criteria where CPR WILL NOT be started if any one of the criteria is met:

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	○ Decapitation, Rigor Mortis, ○ Lividity, Hypostasis ○ Hemitorporectomy ○ Transection, Massive Cranial or Cerebral Destruction, Incineration ○ Complete Exsanguination ○ Decomposition / Putrefaction ○ Frozen Solid ○ Prolonged Submersion.
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	Ambulance Systems Indicators (AmbSYS) - NHS England Digital Local regulatory threshold informed by baseline performance, clinical importance, data reliability, and implementation feasibility. This target is not presented as an international benchmark unless explicitly stated.
Target	≥20%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS009

KPI Description (title):	Percentage of Cardiac Arrest Patients with Shockable Rhythm Receiving Defibrillation Prior to Hospital Arrival
Domain	Effectiveness of Care
Indicator Type	Process
Definition:	Percentage of patients with prehospital cardiac arrest and an initial or subsequent shockable rhythm for whom defibrillation was delivered by EMS at any time prior to arrival at the receiving healthcare facility. Defibrillation delivered prior to patient movement or transport (e.g. at home or at the scene) is included. This indicator measures the appropriate delivery of defibrillation and does not assess neurological outcome, survival to discharge, or post-resuscitation care.
Calculation:	Numerator: Number of patients with prehospital cardiac arrest and a documented shockable rhythm (ventricular fibrillation or pulseless ventricular tachycardia) who received one or more defibrillation shocks delivered by EMS at any time prior to arrival at the receiving healthcare facility. Numerator Guidance: If a shockable rhythm has been recorded multiple times during transport of a patient to the receiving healthcare facility, the numerator will only be counted once. Denominator: Total number of patients with prehospital cardiac arrest who were attended by EMS and in whom a shockable rhythm (ventricular fibrillation or pulseless ventricular tachycardia) was documented at any time during resuscitation prior to arrival at the receiving healthcare facility, excluding patients meeting defined exclusion criteria. Denominator Guidance: Patients shall be included in the denominator if all of the following apply: • The patient experienced a prehospital cardiac arrest • EMS assessment or monitoring documented a shockable rhythm, defined as: ○ Ventricular fibrillation (VF), or ○ Pulseless ventricular tachycardia (pVT) • The shockable rhythm was identified at any time prior to hospital arrival, whether:

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

	○ On initial rhythm analysis, or ○ During subsequent rhythm reassessment Denominator Exclusions: • Obvious death criteria where CPR WILL NOT be started if any one of the criteria is met: ○ Decapitation, Rigor Mortis, ○ Lividity, Hypostasis ○ Hemicorporectomy ○ Transection, Massive Cranial or Cerebral Destruction, Incineration ○ Complete Exsanguination ○ Decomposition / Putrefaction ○ Frozen Solid ○ Prolonged Submersion.
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	<i>Subject Matter Expert Recommendation</i>
Target	100%
Data Source/ Report Name:	• Electronic Patient Care Report, Dispatch Center Data, and monitor/defibrillator device data where available.

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS010

KPI Description (title):	Percentage of Stroke-Suggestive Patients with Glucose Measurement Documented
Domain	Effectiveness of care
Indicator Type	Process
Definition:	Percentage of patients with documented clinical suspicion of acute stroke for whom a blood glucose measurement was performed and documented by EMS in the electronic patient care report.
Calculation:	Numerator: Number of patients with documented clinical suspicion of acute stroke for whom a blood glucose measurement was performed prior to hospital arrival and documented by EMS in the electronic patient care report. Denominator: Total number of patients with documented clinical suspicion of acute stroke who were assessed and transported by EMS during the reporting period. Denominator Guidance: Patients shall be included in the denominator where there is documented clinical suspicion of acute stroke at the time of EMS assessment, supported by one or more documented focal neurological signs or acute neurological deficits, and who were assessed and transported by EMS during the reporting period. Supporting focal neurological signs or acute neurological deficits may include one or more of the following, as recorded in the electronic patient care report: • Face drooping or facial asymmetry. • Arm or limb weakness or numbness. • Speech difficulty or slurred speech. • Confusion or altered mental status. • Trouble seeing in one or both eyes. • Trouble walking, dizziness, or loss of balance/coordination. • Severe headache with no known cause. • Fatigue only where associated with focal neurological deficit or documented stroke suspicion. • Nausea and/or vomiting only where associated with focal neurological deficit or documented stroke suspicion. Denominator Exclusions: • Interfacility transfer e.g., clinic to hospital or hospital to hospital.
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

International comparison if available	<i>Subject Matter Expert Recommendation</i>
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS011

KPI Description (title):	Percentage of Patients with Life / Limb threatening External Hemorrhage Achieving Hemostasis Prior to Hospital Arrival
Domain	Effectiveness of Care
Indicator Type	Safety
Definition:	Percentage of patients presenting with Life/Limb threatening hemorrhage for whom hemostasis was achieved by EMS prior to arrival at the receiving healthcare facility.
Calculation:	Numerator: Number of patients with Life/Limb threatening external hemorrhage that achieved documented hemostasis prior to arrival at the receiving healthcare facility. Numerator Guidance: Hemostasis: no ongoing uncontrolled external bleeding after EMS intervention, <u>documented before transport or at hospital handover</u>. Denominator: Total number of patients presenting with Life/Limb threatening external hemorrhage (as defined in the glossary) who were assessed and transported by EMS during the reporting period. Denominator Exclusions: • Interfacility transfer e.g., clinic to hospital or hospital to hospital
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	<i>Subject Matter Expert Recommendation</i>
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS012

KPI Description (title):	Percentage of Burn Injury Patients with Complete Burn Assessment Documentation
Domain	Effectiveness of Care
Indicator Type	Process
Definition:	Percentage of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for burn for whom complete burn assessment documentation was recorded by EMS during prehospital care.
Calculation:	Numerator: Total number of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for burn who were assessed and transported by EMS during the reporting period who had complete burn assessment documentation recorded by EMS in the electronic patient care report Numerator Guidance: <u>Documentation Requirements:</u> For numerator inclusion, all of the following elements must be documented in the electronic patient care report: • Mechanism of burn injury (e.g. thermal, chemical, electrical) • Estimated Total Body Surface Area (TBSA) affected • Burn depth / thickness, as assessed in the prehospital setting Denominator: Total number of patients meeting DoH-defined Special Program Pathway (SPP) criteria established for burn who were assessed and transported by EMS during the reporting period. Denominator Exclusion: • Cases where full burn assessment was impossible due to immediate life threat, unsafe scene, or urgent extrication should be reported separately, not hidden (but not to be part of the denominator)
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	<i>Subject Matter Expert Recommendation</i>
Desired Direction:	Higher is Better
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS013

KPI Description (title):	Percentage of Patients with Pain Assessment Documented
Domain	Patient-Centeredness
Indicator Type	Process
Definition:	Percentage of patients transported by EMS for whom a pain assessment was performed and documented in the electronic patient care report from initial patient contact until prior to hospital arrival
Calculation:	Numerator: Number of patients transported by EMS who had a pain assessment documented prior to hospital arrival in the electronic patient care report Numerator Guidance: - Documentation of “no pain” or a recorded pain score of zero (0) shall be considered valid pain assessment documentation. - A blank or missing pain assessment entry shall not be interpreted as “no pain” and shall be considered non-compliance with pain assessment documentation Denominator: Total number of patients transported by EMS during the reporting period Denominator Exclusion: - Patients who are unresponsive or clinically unable to participate in pain assessment, where documentation of inability is recorded <i>** “Unable to assess” should be valid only where the reason is documented using a structured field, for example unresponsive, severe cognitive/communication barrier, or immediate life-threatening condition.</i>
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	Subject Matter Expert Recommendation
Desired Direction:	Higher is Better
Target	≥90%
Data Source/ Report Name:	Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS014

KPI Description (title):	Percentage of Patients with Pain Receiving Analgesia
Domain	Patient-Centeredness
Indicator Type	Process
Definition:	Percentage of patients with documented pain for whom analgesia was administered by EMS during prehospital care.
Calculation:	Numerator: Number of patients presenting with a documented pain who received analgesia administered by EMS during prehospital care Denominator: Total number of patients presenting with a documented pain who were transported by EMS during the reporting period. Denominator Exclusions: • Patients who refused analgesia • Patients with documented contraindications to analgesia administration • Patients with pain score is 0
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	<i>Subject Matter Expert Recommendation</i>
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS015

KPI Description (title):	Percentage of Patients Assessed with Pain, Receiving Analgesia and Documented Pain Reassessment
Domain	Patient-Centeredness
Indicator Type	Process
Definition:	Percentage of patients assessed by EMS to have pain, for whom analgesia was administered and pain was reassessed at least once prior to arrival at the receiving healthcare facility, as documented in the electronic patient care report.
Calculation:	Numerator: Number of patients assessed by EMS to have pain who were administered analgesia and had at least one documented pain reassessment after analgesia administration and prior to arrival at the receiving healthcare facility, as recorded in the electronic patient care report. Numerator Guidance: To be considered as a numerator, the documentation on the electronic patient care report has to meet all of the following criteria: • Patient was assessed to have pain by EMS, and • Analgesia administered by EMS upon acknowledgement of the presence of pain • There should be at least one documented pain reassessment after analgesia administration and prior to hospital arrival • If there are multiple pain reassessments documented during the travel/transfer, consider only the last pain reassessment Denominator: Total number of patients transported by EMS during the reporting period who had pain and was administered with analgesia at any point during prehospital care, as documented in the electronic patient care report. Denominator Exclusion: • Patients who are unresponsive or clinically unable to participate in pain assessment, where inability is clearly documented
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	<i>Subject Matter Expert Recommendation</i>
Desired Direction:	Higher is Better
Target	≥90%
Data Source/ Report Name:	• Electronic Patient Care Report and Dispatch Center Data

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Type: Emergency Medical Service

Indicator Number: EMS016

KPI Description (title):	Percentage of Air Ambulance Activations Becoming Airborne ≤20 Minutes
Domain	Timeliness of care
Sub-domain	Waiting time
Indicator Type	Process
Definition:	Percentage of air ambulance activations for which the air ambulance became airborne within 20 minutes from the time of first call receipt by the Emergency Operations / Dispatch Center.
Calculation:	Numerator: Number of air ambulance activations in which the air ambulance became airborne (base take-off) within ≤20 minutes from the timestamp of first call receipt by the Emergency Operations / Dispatch Center. Denominator: Total number of air ambulance activations received during the reporting period Denominator Exclusions: • Air Traffic Control (ATC) permission delays • Adverse weather conditions affecting air ambulance operations • Cancelled air ambulance activations, including cancellations prior to take-off
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
Target	≥90%
Notes for all facilities	
Data Source/ Report Name:	• Electronic Patient Care Report, Dispatch Center Data, air ambulance activation log, and flight/aviation operations data.

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Summary of Changes: 2026 V2

KPI No.	Changes
EMS001	- Revised the title to: Percentage of Urban Ambulance Responses Arriving at Scene ≤ 7 Minutes - Updated the threshold from ≤ 15 minutes to ≤ 7 minutes - Overall wordings were refined - Urban areas are explicitly defined according to Department of Municipality & Transport classification - Denominator exclusions was added: - Interfacility transfer e.g., clinic to hospital or hospital to hospital. - Calls canceled prior to the arrival of the ambulance, by the patient, dispatch, police, or other government entity.
EMS002	- Revised the title to: Percentage of Rural Ambulance Responses Arriving at Scene ≤ 15 Minutes - Updated the threshold from ≤ 25 minutes to ≤ 15 minutes - Overall wordings were refined - Rural areas are explicitly defined according to Department of Municipality & Transport classification - Denominator exclusions was added: - Interfacility transfer e.g., clinic to hospital or hospital to hospital. - Calls canceled prior to the arrival of the ambulance, by the patient, dispatch, police, or other government entity.
EMS003	Newly added KPI **Aspirin administration KPI was moved to EMS004
EMS004	- Indicator scope changed from “Cardiac Arrest Arrival at Hospital with a Pulse” to “Percentage of Patients with Acute Coronary Syndrome (ACS) Administered Aspirin Prior to Hospital Arrival” - Explicit ACS symptom-based denominator guidance added, replacing diagnosis-based inclusion. - Denominator exclusion were added: - Patients who were not transported by EMS. - Patients who do not present with symptoms suggestive of ACS. - Patients with documented contraindications to aspirin, including true allergy/anaphylaxis, active bleeding, or other protocol-defined contraindication. - Patients who refused aspirin administration. - Patients with potential aspiration risk (e.g., unconsciousness) or another specific contraindication. - Patients unable to safely tolerate oral medication due to severe respiratory distress or aspiration risk. - Patients who already took Aspirin 300 mg (self-administration, given by other facility ..etc).
EMS005	Newly added KPI **Indicator replaced: “STEMI Scene Time”

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

KPI No.	Changes
EMS006	**Indicator replaced: “Stroke Scene Time” was expanded New KPI Title: Percentage of ACS, STEMI & Stroke Patients Departing Scene ≤15 Minutes - Indicator scope expanded: - V1 measured Stroke Scene Time only. - V2 measures ACS, STEMI, and Stroke scene departure time under one KPI. - Denominator changed: - V1 denominator: Patients meeting stroke alert criteria. - V2 denominator: Patients presenting with symptoms suggestive of ACS, STEMI, or Stroke, independent of alert activation. - Presentation-based inclusion introduced: - BEFAST explicitly enumerated for stroke presentations (B, E, F, A, S, T). - ACS/STEMI symptom-based inclusion added (e.g., chest pain, radiation, dyspnea, diaphoresis, nausea, dizziness). - Indicator definition revised: - From stroke-only scene time to time-critical scene departure for multiple high-risk presentations. - New exclusions added: - Patients in cardiac arrest. - Cases requiring advanced airway intervention or non-invasive ventilation (CPAP/BiPAP) prior to transport. - Calls cancelled prior to ambulance arrival.
EMS007	Newly added KPI **Indicator replaced: “STEMI Alert Transport” **Purpose of STEMI Alert Transport were incorporated to EMS003 and EMS006
EMS008	Newly added KPI **Indicator replaced: “Stroke Alert Transport” **Purpose of Stroke Alert Transport were incorporated to EMS003 and EMS006
EMS009 to EMS016	Newly added KPIs

APPENDIX- ICD_10 Diagnosis Codes

Stroke Ischemic:

I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery
I63.011	Cerebral infarction due to thrombosis of right vertebral artery
I63.012	Cerebral infarction due to thrombosis of left vertebral artery
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery
I63.02	Cerebral infarction due to thrombosis of basilar artery
I63.031	Cerebral infarction due to thrombosis of right carotid artery
I63.032	Cerebral infarction due to thrombosis of left carotid artery
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery
I63.09	Cerebral infarction due to thrombosis of other precerebral artery
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery
I63.111	Cerebral infarction due to embolism of right vertebral artery
I63.112	Cerebral infarction due to embolism of left vertebral artery
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery
I63.12	Cerebral infarction due to embolism of basilar artery
I63.131	Cerebral infarction due to embolism of right carotid artery
I63.132	Cerebral infarction due to embolism of left carotid artery
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries
I63.139	Cerebral infarction due to embolism of unspecified carotid artery
I63.19	Cerebral infarction due to embolism of other precerebral artery
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral arteries
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral arteries
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral arteries
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar arteries
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid arteries
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery
I63.323	Cerebral infarction due to thrombosis of bilateral anterior arteries
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery
I63.333	Cerebral infarction due to thrombosis of bilateral posterior arteries
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery
I63.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery
I63.39	Cerebral infarction due to thrombosis of other cerebral artery
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery
I63.411	Cerebral infarction due to embolism of right middle cerebral artery
I63.412	Cerebral infarction due to embolism of left middle cerebral artery
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery
I63.441	Cerebral infarction due to embolism of right cerebellar artery
I63.442	Cerebral infarction due to embolism of left cerebellar artery
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery
I63.49	Cerebral infarction due to embolism of other cerebral artery
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle arteries
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior arteries
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior arteries
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic
I63.8	Other cerebral infarction
I63.9	Cerebral infarction, unspecified

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Stroke Hemorrhagic:

I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery
I60.8	Other nontraumatic subarachnoid hemorrhage
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified
I61.3	Nontraumatic intracerebral hemorrhage in brain stem
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized
I61.8	Other nontraumatic intracerebral hemorrhage
I61.9	Non traumatic intracerebral hemorrhage, unspecified

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Acute Myocardial Infarction

I21.0	ST elevation (STEMI) myocardial infarction of anterior wall
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.1	ST elevation (STEMI) myocardial infarction of inferior wall
I21.11	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.2	ST elevation (STEMI) myocardial infarction of other sites
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.9	Acute myocardial infarction, unspecified
I21.A	Other type of myocardial infarction
I21.A1	Myocardial infarction type 2
I21.A9	Other myocardial infarction type

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

Cardiac Arrest

I46.2	Cardiac arrest due to underlying cardiac condition
I46.8	Cardiac arrest due to other underlying condition
I46.9	Cardiac arrest, cause unspecified

JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

APPENDIX II – Urban and Rural Areas in the Emirate of Abu Dhabi



JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators



JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators



JAWDA Pre-Hospital Emergency Medical Services (EMS) Indicators

