

Data Field	Definition
Prehospital Data	
Site Information:	
<i>Country</i>	
<i>City/EMS District</i>	
<i>Site Number</i>	
<i>Trial Number</i> (For official use only)	This is a unique record identifier assigned to each patient when the data is being stored in the database. This number will be assigned by the trial coordinating center.
Incident Information:	
<i>Date of Incident</i>	Provide the date when the cardiac arrest occurred. Enter date as dd/mm/yyyy.
<i>Incident number</i>	Provide the incident number created by the EMS dispatch center. This acts as one of the identifier for tracing EMS records.
<i>Location of incident</i>	Record the address or location of incident where the patient was found, including the postal/zip code.
<i>Location type</i>	<p>Indicate type of location where the patient was found. Check only <u>ONE</u> that applies from the list provided.</p> <p><i>Home/Residence:</i> defined as residential home, including inside or nearby surrounding of the home/apartment.</p> <p><i>Healthcare facility:</i> includes government outpatient clinic/polyclinic, primary healthcare clinic, specialist outpatient clinic, dialysis centre, and other private healthcare facilities.</p> <p><i>Public/Commercial building:</i> includes office premises, government offices, shopping mall, educational institution (school), etc.</p> <p><i>Residential institution:</i> includes home for the aged, assisted living institution, community hospital, sheltered home for mentally ill, hospice centre, day rehabilitation centre and elderly day care centre.</p> <p><i>Street/Highway:</i> includes all vehicular road, public road and highway.</p> <p><i>Industrial place:</i> includes industrial premise, construction site, factory, warehouse, shipyards and wharf.</p> <p><i>Place of recreation:</i> includes gym, stadium, sports complex, park, public swimming complex, golf course, soccer field and other place of recreation/sport.</p> <p><i>Others:</i> refers to locations that are not included above. State the location in the space provided.</p>
Patient Information:	

<i>Trial log</i>	This number will be assigned by the <i>individual sites</i> and must be a specific identifier for each incident reported. This number acts as an identifier for tracing and merging the prehospital and ED data.
<i>Date of birth</i>	Provide patient's date of birth and enter date as dd/mm/yyyy.
<i>Gender</i>	Indicate "male" or "female".
<i>Race/Ethnicity</i>	<p>Indicate the race/ethnicity of the patient.</p> <p>Check only <u>ONE</u> that applies from the list provided.</p> <p>Asian – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, e.g. Cambodia, China, Brunei, Japan, Korea, Malaysia, Pakistan, Philippines, Singapore, Thailand and Vietnam.</p> <p>White/Caucasian – A person having origins in any of the original peoples of Europe, Middle East, or North Africa.</p> <p>Native American – A person having origins in any of the original peoples of North and South America (including Central America), i.e. American Indian or Alaska native.</p> <p>Black/African – A person having origins in any of the black racial groups of Africa.</p> <p>Hispanic/Latino – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin.</p> <p>Pacific Islander/Native Hawaiian – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.</p> <p><i>(adopted from the U.S. Office Of Management And Budget: Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity; Oct 30, 1997)</i></p>
<i>Past medical history</i>	<p>Check all that applies from the list of medical histories provided.</p> <p>State other past medical histories that are not included in the space provided.</p> <p>Indicate "Unknown" if unable to obtain any medical history from bystander.</p>
<p>Dispatch Information:</p> <p>(*Enter time as hh:mm:ss [24 hour clock]. Dispatch time information from EMS records should only be used as a <u>FINAL</u> option.)</p> <p># First responder defined as the rapid responder who is also dispatched via emergency call center but does not transport the patient, e.g. firefighter, motorcycle/bicycle medic.</p> <p>## Ambulance defined as the responding vehicle that is used to transport patients.</p>	
<i>Time call received by dispatch center</i>	<p>Time of the earliest call received at the dispatch center (emergency call centre).</p> <p>The recorded time of call received should be the first ring at the dispatch center (emergency call center). The time of call</p>

	received has to be obtained from dispatch records.
<i>Time First responder (FR) dispatched</i>	Time when the responding FR was notified by the EMS dispatch centre. The time of dispatch has to be obtained from dispatch records.
<i>Time ambulance dispatched</i>	Time when the responding ambulance was notified by the EMS dispatch centre. The time of dispatch has to be obtained from dispatch records.
<i>Time FR arrived at scene</i>	Time FR arrived at scene defined as the time FR vehicle stopped moving at the scene. The time of arrival has to be obtained from dispatch records rather than EMS records.
<i>Time ambulance arrived at scene</i>	Time ambulance arrived at scene defined as the time ambulance stopped moving at the scene. The time of arrival has to be obtained from dispatch records rather than EMS records.
<i>Time EMS arrival at patient side</i>	Time EMS arrival at patient side refers to the timing of the 1 st EMS personnel, either FR or ambulance crew, reached the patient's side.
<i>Time ambulance left scene</i>	Time when the patient was transported from the scene to the designated emergency department (ED), i.e. when ambulance started moving. The time of ambulance left scene has to be obtained from dispatch records.
<i>Time ambulance arrived at ED</i>	Time when the ambulance arrived at the ED, i.e. when the ambulance stopped moving. The time of ambulance arrived at hospital has to be obtained from dispatch records.
Event information:	
<i>Estimated time of arrest</i>	<p>It is the onset of the cardiac arrest; i.e. patient is unconscious, not breathing and has no pulse.</p> <p>If the patient responded to bystander's CPR or defibrillation, and has ROSC prior to EMS arrival, but later re-arrest in front of EMS, the time of arrest would <u>NOT</u> be the re-arrest timing. It should be the first arrest timing prior to EMS arrival.</p> <p>Enter time as hh:mm:ss (24 hour clock).</p>
<i>Arrest witnessed</i>	<p>Indicate "Not witnessed", "By bystander" or "By EMS (FR/Paramedic).</p> <p>Not witnessed is defined as the arrest event was either not seen or heard by anyone.</p> <p>Arrest witnessed is defined as the arrest was seen or heard by a bystander (e.g. passer-by, lay person, family, private general practitioner, police, healthcare provider from nursing home/dialysis center, etc.) or the EMS team.</p> <p>If the patient responded to bystander's CPR or defibrillation, and has ROSC prior to EMS arrival, but later re-arrest in front of EMS, the arrest would <u>NOT</u> be considered witnessed by EMS.</p>

<i>Bystander CPR</i>	<p>Indicate “Yes”, “No”, “Unknown/not noted”, or “NA”.</p> <p>Bystander includes passer-by, lay person, member of the public, family member, police, private general practitioner, healthcare provider from nursing home/dialysis center, etc.</p> <p>Indicate whether CPR (chest compressions and/or ventilations) was attempted by a bystander prior to arrival of EMS team.</p> <p>If arrest was witnessed by EMS team, select “NA”.</p>
<i>Bystander AED applied</i>	<p>Indicate “Yes”, “No”, “Unknown/not noted”, or “NA”.</p> <p>Indicate whether AED was applied by a bystander prior to arrival of EMS team. If AED was applied, indicate whether the bystander delivered any shock to the patient.</p> <p>If arrest was witnessed by EMS team, select “NA”.</p>
<i>Cause of arrest</i>	<p>Indicate if the cause of arrest “Trauma” or “Non-trauma”.</p> <p><i>Trauma</i>: defined as out-of-hospital injury (e.g. blunt or penetrating trauma, burns, etc.) resulting in traumatic arrest.</p> <p><i>Non-trauma</i>: defined as out-of-hospital cardiac arrest which is not associated with any trauma.</p>
Resuscitation Information:	
<i>Resuscitation attempted</i>	<p>Indicate “Yes” or “No”.</p> <p>Indicate whether EMS team attempted to resuscitate the patient.</p> <p>Patient with do not resuscitate directive; obvious signs of death (rigor motis, lividity or decapitation); resuscitation was not required or confirmed death at scene without any resuscitation will be classified as resuscitation not attempted.</p>
<i>First arrest rhythm</i>	<p>Defined as the <i>first</i> cardiac arrest rhythm captured by EMS team after placement of defibrillator pads or electrodes.</p> <p>Check only <i>ONE</i> that applies from the list provided.</p> <p><i>Abbreviations:</i> VF – Ventricular fibrillation VT – Ventricular tachycardia PEA – Pulseless electrical activity</p> <p>If first arrest rhythm was not documented in EMS records, select “Unknown/not noted”.</p>
<i>Time CPR started by EMS</i>	<p>Time when the first chest compression applied by the EMS team.</p> <p>Standardize the practice of using the power on of the AED when EMS team arrives at patient side, as a timer for time CPR started by EMS.</p> <p>Enter time as hh:mm:ss (24 hour clock). Select ‘Unknown/not noted’ if information has not been recorded.</p>

<i>Time AED applied by EMS</i>	<p>Time when the AED pads were placed onto the patient by the EMS team.</p> <p>The source of this timing should be the time captured by the AED when the pads were applied onto the patient.</p> <p>Enter time as hh:mm:ss (24 hour clock). Select 'Unknown/not noted' if information has not been recorded.</p>
<i>Defibrillation by EMS</i>	<p>Indicate "Yes" or "No".</p> <p>Indicate whether EMS team delivered shocks to patient. If shocks were delivered, indicate the time of the <i>first</i> shock given. The source of this timing should be obtained from the AED.</p> <p>Enter time as hh:mm:ss (24 hour clock). Select 'Unknown/not noted' if information has not been recorded.</p>
<i>Advanced airway used</i>	<p>Indicate "Yes", "No" or "Unknown/not noted".</p> <p>If advanced airway was used, indicate which type of airway was applied by EMS team. Check only <i>ONE</i> that applies from the list provided.</p> <p><i>Abbreviations:</i> Oral ET – oral endotracheal intubation LMA – laryngeal mask airway</p> <p>State other types of advance airway used that are not included in the space provided. Please note that Oropharyngeal (also known as oral airway, OPA or Guedel airway) and Nasopharyngeal airways are <u>NOT</u> advanced airways but are only airway adjuncts.</p>
<i>Drug administration</i>	<p>Indicate "Yes", "No" or "Unknown/not noted".</p> <p>Check all that applies from the list provided. Indicate which of the listed drugs were administrated by the EMS team.</p> <p>State other administered drugs that are not included in the space provided.</p>
<i>Return of spontaneous circulation</i>	<p>Indicate "Yes", "No" or "Unknown/not noted".</p> <p>Return of spontaneous circulation (ROSC) refers to the regaining of palpable pulse.</p> <p>If there was any ROSC (transient or sustained), <i>prior to or after</i> the arrival of EMS team, indicate the time of the <i>first</i> ROSC detected.</p> <p>Enter time as hh:mm:ss (24 hour clock). Select 'Unknown/not noted' if information has not been recorded.</p>
<i>Disposition:</i>	
<i>Final status at scene</i>	<p>Indicate the patient's status at the end of the pre-hospital care; whether patient was conveyed to ED by EMS or was pronounced dead at scene by the EMS team.</p>

<i>Transported to (name of hospital)</i>	Enter the name of the receiving ED or hospital.
<i>Patient's status at ED/hospital arrival</i>	Indicate the patient's status at ED arrival, whether there was ROSC (patient regained palpable pulse while en route to ED or upon arrival at ED, and no CPR in progress); or resuscitation efforts are ongoing (CPR in progress) upon arrival at ED.
Emergency Department (ED) Data (*The preferred source of data is the ED and hospital patient case record.)	
Site Information:	
<i>Country</i>	
<i>City</i>	
<i>Site Number</i>	
<i>Trial Number</i> (For official use only)	This is a unique record identifier assigned to each patient when the data is being stored in the database. This number will be assigned by the trial coordinating center.
<i>Patient brought in by</i>	Indicate "EMS" or "Non-EMS" Brought in by 'EMS' refers to case that was conveyed by ambulance which was dispatched via EMS dispatch center. Brought in by 'non-EMS' refers to case that was conveyed by private ambulance which was <u>NOT</u> dispatched via EMS dispatch center, own transport or public transport. If patient was brought in by 'non-EMS', indicate the mode of transportation: private ambulance, own transport or public transport.
Patient Information: (FOR NON-EMS CASE ONLY)	
<i>Trial log</i>	This number will be assigned by the individual sites and must be a specific identifier for each incident reported. This number acts as an identifier for tracing ED data.
<i>Date of birth</i>	Provide patient's date of birth and enter date as dd/mm/yyyy.
<i>Gender</i>	Indicate "male" or "female".
<i>Race/Ethnicity</i>	Indicate the race/ethnicity of the patient. Check only <u>ONE</u> that applies from the list provided. Asian – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, e.g. Cambodia, China, Brunei, Japan, Korea, Malaysia, Pakistan, Philippines, Singapore, Thailand and Vietnam. White/Caucasian – A person having origins in any of the original peoples of Europe, Middle East, or North Africa.

	<p>Native American – A person having origins in any of the original peoples of North and South America (including Central America), i.e. American Indian or Alaska native.</p> <p>Black/African – A person having origins in any of the black racial groups of Africa.</p> <p>Hispanic/Latino – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin.</p> <p>Pacific Islander/Native Hawaiian – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.</p> <p><i>(adopted from the U.S. Office Of Management And Budget: Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity; Oct 30, 1997)</i></p>
<i>Past medical history</i>	<p>Check all that applies from the list of medical histories provided.</p> <p>State other past medical histories that are not included in the space provided.</p> <p>Indicate “Unknown” if unable to obtain any medical history from bystander.</p>
<i>Incident and Event Information: (FOR NON-EMS CASE ONLY)</i>	
<i>Location type</i>	<p>Indicate type of location where the patient was found.</p> <p>Check only <u>ONE</u> that applies from the list provided.</p> <p><i>Home/Residence:</i> defined as residential home, including inside or nearby surrounding of the home/apartment.</p> <p><i>Healthcare facility:</i> includes government outpatient clinic/polyclinic, primary healthcare clinic, specialist outpatient clinic, dialysis centre, and other private healthcare facilities.</p> <p><i>Public/Commercial building:</i> includes office premises, government offices, shopping mall, educational institution (school), etc.</p> <p><i>Residential institution:</i> includes home for the aged, assisted living institution, community hospital, sheltered home for mentally ill, hospice centre, day rehabilitation centre and elderly day care centre.</p> <p><i>Street/Highway:</i> includes all vehicular road, public road and highway.</p> <p><i>Industrial place:</i> includes industrial premise, construction site, factory, warehouse, shipyards and wharf.</p> <p><i>Place of recreation:</i> includes gym, stadium, sports complex, park, public swimming complex, golf course, soccer field and other place of recreation/sport.</p> <p><i>Other:</i> refers to locations that are not included above. State the location in the space provided.</p>

<i>Estimated time of arrest</i>	<p>It is the onset of the cardiac arrest; i.e. patient is unconscious, not breathing and has no pulse.</p> <p>If the patient responded to bystander’s CPR or defibrillation, and has ROSC prior to the arrival of private ambulance, but later re-arrest in front of private ambulance, the time of arrest would <u>NOT</u> be the re-arrest timing. It should be the first arrest timing prior to the arrival of private ambulance</p> <p>Enter time as hh:mm:ss (24 hour clock).</p>
<i>Arrest witnessed</i>	<p>Indicate “Not witnessed”, “By bystander” or “By Private Ambulance”</p> <p>Not witnessed is defined as the arrest event was either not seen or heard by anyone.</p> <p>Arrest witnessed is defined as the arrest was seen or heard by a bystander (e.g. passer-by, lay person, family, private general practitioner, healthcare provider from nursing home/dialysis center, etc.) or the private ambulance team.</p> <p>If the patient responded to bystander’s CPR or defibrillation, and has ROSC prior to the arrival of private ambulance, but later re-arrest in front of private ambulance team, the arrest would <u>NOT</u> be considered witnessed by private ambulance .</p>
<i>Bystander CPR</i>	<p>Indicate “Yes”, “No” or “Unknown/not noted”.</p> <p>Bystander includes passer-by, lay person, member of the public, family member, private general practitioner, healthcare provider from nursing home/dialysis center, etc.</p> <p>Indicate whether CPR (chest compressions and/or ventilations) was attempted by a bystander prior to arrival of private ambulance team.</p>
<i>Bystander AED applied</i>	<p>Indicate “Yes”, “No” or “Unknown/not noted”.</p> <p>Indicate whether AED was applied by a bystander prior to arrival of private ambulance team. If AED was applied, indicate whether the bystander delivered any shock to the patient.</p>
<i>Cause of arrest</i>	<p>Indicate if the cause of arrest “Trauma” or “Non-trauma”.</p> <p><i>Trauma</i>: defined as out-of-hospital injury (e.g. blunt or penetrating trauma, burns, etc.) resulting in traumatic arrest.</p> <p><i>Non-trauma</i>: defined as out-of-hospital cardiac arrest which is not associated with any trauma.</p>
ED Outcome:	
<i>Date of arrival at ED</i>	<p>Provide the date when the patient arrived at the ED.</p> <p>Enter date as dd/mm/yyyy.</p>
<i>Time of arrival at ED</i>	<p>Provide the time when the patient arrived at the ED.</p> <p>Enter time as hh:mm:ss (24 hour clock).</p>

<i>Patient status on arrival at ED</i>	<p>This refers to patient's initial status upon arrival at ED, whether patient has spontaneous breathing and/or circulation.</p> <p>Indicate "Yes" or "No" for both items.</p> <p>The presence of breathing is indicated as patient is breathing on his/her without any aid of advanced airway. The presence of circulation is indicated by a palpable pulse and CPR has stopped.</p>
<i>Cardiac rhythm on arrival at ED</i>	<p>Defined as the patient's cardiac rhythm upon arrival at ED. Check only <i>ONE</i> that applies from the list provided.</p> <p><i>Abbreviations:</i> VF – Ventricular fibrillation VT – Ventricular tachycardia PEA – Pulseless electrical activity</p> <p>Sinus or other perfusing rhythm refers to cardiac rhythm with a palpable pulse.</p>
<i>ED defibrillation</i>	<p>Indicate "Yes" or "No".</p> <p>Indicate whether shocks were delivered to patient during resuscitation in the ED.</p>
<i>Advanced airway used</i>	<p>Indicate "Yes", "No" or "Unknown/not noted".</p> <p>If advanced airway was used, indicate which type of airway was applied during ED resuscitation. Check only <i>ONE</i> that applies from the list provided.</p> <p><i>Abbreviations:</i> Oral ET – oral endotracheal intubation LMA – laryngeal mask airway</p> <p>State other types of advance airway used that are not included in the space provided. Please note that Oropharyngeal (also known as oral airway, OPA or Guedel airway) and Nasopharyngeal airways are <u>NOT</u> advanced airways but are only airway adjuncts.</p>
<i>Drug administration</i>	<p>Indicate "Yes", "No" or "Unknown/not noted".</p> <p>Check all that applies from the list provided. Indicate which of the listed drugs were administrated during ED resuscitation.</p> <p>State other administered drugs that are not included in the space provided.</p>
<i>Return of spontaneous circulation</i>	<p>Indicate "Yes", "No" or "Unknown/not noted".</p> <p>Return of spontaneous circulation (ROSC) refers to the regaining of palpable pulse.</p> <p>If there was any ROSC (transient or sustained) during ED resuscitation, indicate the time of the <u>first</u> ROSC detected.</p> <p>Enter time as hh:mm:ss (24 hour clock). Select 'Unknown/not noted' if information has not been recorded.</p>

<i>Hypothermia therapy</i>	<p>Indicate “Yes” or “No”.</p> <p>Indicate whether hypothermia procedures (e.g. external cooling – ice packs or cooling blankets/pads and internal cooling – cold IV infusion or invasive catheter lines for internal cooling) were performed in ED.</p>
<i>ECMO therapy</i>	<p>Indicate “Yes” or “No”.</p> <p><i>Abbreviations:</i> ECMO – extracorporeal membrane oxygenation</p> <p>Indicate whether ECMO procedure was performed in ED.</p>
<i>Etiology of arrest</i>	<p>Based on the information from prehospital and ED records, indicate the obvious cause of cardiac arrest, either “cardiac” or “non-cardiac” etiology.</p> <p>Cardiac etiology – cardiac arrest presumed to be due to heart disease.</p> <p>Non-cardiac etiology – the cause of arrest is presumed to be other than cardiac etiology, e.g. asthma, terminal illness, cerebrovascular accident, drug overdose, suicide, drowning, trauma, etc.</p>
<i>Outcome of patient</i>	<p>Indicate the patient’s status at the end of the ED resuscitation, whether patient was admitted to the hospital, transferred to another hospital or died in ED.</p>
<i>Hospital Outcome: (FOR PATIENTS WHO SURVIVED TO ADMISSION)</i>	
<i>Patient status at 30th day post arrest</i>	<p>Indicate the patient’s status at the 30th day post arrest, whether patient was discharged alive, still remain hospitalized or died in hospital.</p>
<i>Date of discharge or death</i>	<p>Indicate the date of discharge (if patient was discharged alive) or date of death (if patient died in hospital).</p> <p>Enter date as dd/mm/yyyy.</p>
<i>Patient neurological status on discharge or at 30th day post arrest</i>	<p>Glasgow-Pittsburgh cerebral performance and overall performance categories are used to assess the patient’s neurological status at the time of discharge or at the 30th day post arrest.</p> <p>The cerebral performance category (CPC) evaluates cerebral performance capabilities. The overall performance category (OPC) reflects cerebral plus non-cerebral status and evaluates general performance.</p> <p>Refer to the table below for the scoring and details of the CPC and OPC.</p>

Glasgow-Pittsburg Outcome Categories

Score	Cerebral Categories	Score	Overall Performance Categories
1	Good cerebral performance. Conscious. Alert, able to work and lead a normal life. May have minor psychological or neurological deficits (mild dysphasia, non-incapacitating hemiparesis, or minor cranial nerve abnormalities).	1	Good overall performance. Healthy, alert, capable of normal life. Good cerebral performance (CPC 1) plus no or only mild functional disability from noncerebral organ system abnormalities.
2	Moderate cerebral disability. Conscious. Sufficient cerebral function for part-time work in sheltered environment or independent activities of daily life (dressing, travelling by public transportation, and preparing food). May have hemiplegia, seizures, ataxia, dysarthria, or permanent memory or mental changes.	2	Moderate overall disability. Conscious. Moderate cerebral disability alone (CPC 2) or moderate disability from noncerebral system dysfunction alone or both. Performs independent activities of daily life (dressing, travelling, and food preparation). May be able to work part-time in sheltered environment but disabled for competitive work.
3	Severe cerebral disability. Conscious. Dependent on others for daily support because of impaired brain function (in an institution or at home with exceptional family effort). At least limited cognition. Includes a wide range of cerebral abnormalities from ambulatory with severe memory disturbance or dementia precluding independent existence to paralytic and able to communicate only with eyes, as in the locked-in syndrome.	3	Severe overall disability. Conscious. Severe cerebral disability alone (CPC 3) or severe disability from non-cerebral organ system dysfunction alone or both. Dependent on others for daily support.
4	Coma, vegetative state. Not conscious. Unaware of surroundings, no cognition. No verbal or psychological interactions with environment.	4	Same as CPC 4.
5	Death. Certified brain dead or dead by traditional criteria.	5	Same as CPC 5.