

Glossary

Medical Terminology

Advanced Life Support (ALS) or Advanced Cardiac Life Support (ACLS)

Medical interventions used to treat victims of respiratory and/or cardiac emergencies and stroke, including invasive techniques such as intubation and administration of drugs. (AHA Definition)

Automated External Defibrillator (AED)

A device that has been shown in the medical literature to dramatically increase the potential for reduction of disability and death from cardiovascular emergencies. An AED rapidly analyses the electrical activity of the victim's heart to determine if a shock is needed. (AHA Definition)

Basic Life Support (BLS)

Non-invasive assessments and interventions used to treat victims of respiratory and/or cardiovascular emergencies and stroke. This term has become synonymous with cardiopulmonary resuscitation (CPR) and can include automated external defibrillation (AED). (AHA Definition)

Benchmarking

Methodology to compare systems using cost efficacy indicators. Comparisons in between systems provide a useful tool for improvement.

Cardiac Arrest Situation in which a patient is unconscious, in apnoea, and no pulse is detected. Usually cardiac arrest cases are divided in witnessed cardiac arrest and unwitnessed.

Cardiopulmonary Resuscitation (CPR) Generally refers to non-invasive assessments and interventions used to treat victims of cardiovascular and/or respiratory emergencies and stroke. This term is synonymous with BLS. (AHA Definition)

Chain of survival

Metaphorical concept that reflects the need of all the components of care to obtain a positive outcome, specifically the concept was born for cardiac arrest patients but actually is been use in other time depend conditions like trauma or stroke.

Chest pain

Patients that complain of chest pain that suggest acute coronary conditions. (AMI, Unstable Angina).

Criteria based dispatch Predetermined systemized dispatcher interrogation protocols designed to obtain the minimum amount of information necessary to adequately establish the correct level of response and determine the need for pre-arrival instructions.

Definitive care

The physical place where the patient can receive a treatment or recommendation that solves his medical problem, without the need of other treatments for his acute problem.

Discharged alive

Patients that after a cardiac arrest are discharge from hospital alive, without any consideration of the neurological situation.

Dispatch centre (Medical) Any agency that routinely accepts calls for emergency medical assistance from public and/or that dispatches prehospital emergency medical personnel pursuant to such request.

Dispatcher

An individual that alerts an EMS unit to a call for assistance and directs it to scene.

Emergency calls

Refers to all calls that a Dispatch centre receives. Some of these calls are non-emergency calls and no response is provided. If a unit is dispatched is defined as "Response". If the response moves the patient to other facility for definitive treatment this situation is defined as "Transport".

Emergency department

An area of the hospital dedicated to offering emergency medical evaluation and initial treatment to individuals in need of emergency care.

Emergency Life Support (ELS)

The set of actions needed to keep someone alive until professional help arrives. They include performing cardiopulmonary resuscitation (CPR), dealing with choking, serious bleeding and helping someone that may be having a heart attack. (BHF Definition)

Emergency Medical Services (EMS)

A collective term describing the main agencies, personnel, and institutions involved in planning for, providing and monitoring emergency care. Frequently refers only to prehospital care.

Emergency

A combination of circumstances resulting in a need for immediate medical intervention.

EMS system

The arrangement of personnel, facilities and equipment for the effective and coordinated delivery of EMS required in the prevention and management of incidents which occur either as a result of a medical emergency or of an accident, natural disaster or similar situation.

First Aid

First aid is the initial care provided for an acute illness or injury. The goals of first aid include preserving life, alleviating suffering, preventing further illness or injury and promoting recovery. First aid can be initiated by anyone in any situation, including self-care.

First Hour Quintet

Group of conditions in which immediate treatment is crucial, and EMS can produce a substantial benefit. Includes: Cardiac arrest, Difficulties in breathing, Chest pain, Stroke and Severe Trauma.

Glasgow Coma Scale (GCS)

Clinical score used to evaluate the neurological situation.

Highest priority response

The situation in which the dispatch centre selects a unit that can provide the higher level of care on a specific EMS, despite the unit they send.

Paramedic

An individual trained and licensed to perform advanced life support procedures under the direction of a physician.

Patient Transport System (PTS)

A service that transfers patients to and from medical facilities in non-emergency situations.

Response time interval

Time interval from the call is received in the dispatch centre to arrival of the ambulance on scene, specifically to patient contact. This interval reflects the System response capability.

Response

Unit mobilization to a destination as results of a call.

Return to Spontaneous Circulation (ROSC) Situation in which a patient after receiving CPR circulation is identified by pulse confirmation.

Revascularisation

Medical technique used to reopen an obstructed coronary artery. It can be done out of the hospital using fibrinolytics, or in hospital using angioplasties.

Revised Trauma Score (RTS)

Clinical score used to evaluate trauma patients, provides probability of survival and is used to select the final destination of trauma patients.

Service area

Geographical definition of the area in which a EMS is providing service.

Severe respiratory difficulties Patients with breathing difficulties producing clinical signs of respiratory failure.

Severe Trauma

Trauma cases with RTS equal or less than 5.

Stroke

Patients with neurological deficits including speech difficulties motor deficits and consciousness affectation.

Sudden Cardiac Death

Cessation of cardiac activity, without other warning signs, majority of cases are due to cardiac arrhythmias of which ventricular fibrillation (VF) is most frequent.

System Status Management (SSM)

A computerized personal and ambulance deployment system designed to meet service demands with fewer resources and to ensure appropriated response time and vehicle location.

Time to first shock

Time interval from collapse to the delivery of first shock to patients in VF. A good indicator of system performance.

Transport

Situation in which after a response and on scene evaluation the patient is transport to other destination for definitive care.

Transport time intervals

Time intervals from depart from scene to arrival to hospital.

Triage – Supporting – System (AMPDS) A system based on computerized that facilitates prioritisation on calls based on a structured medical questionnaire.

Triage

To assign victims a priority for care and transport based on the degree of injury and the individual salvage ability in a given situation.

Unit hour

Term used to describe one staffed ambulance hour.

Unit hour utilisation

Term used to describe the number of responses done per unit hour. (Total number of responses divided per total number of unit hours).

Utstein Template

Structuring methodology to evaluate the results of cardiac arrest treatment.

Times and time intervals in EMS

Prehospital interval

Time from Incident occurs till Arrival at Emergency Department.

EMD response interval (*Dispatching time*)

The interval between the time an operator receives an emergency call and the time a dispatcher assigns a vehicle and notifies a rescue team.

Preparation time

The interval between the time the team receives the notification and the time it leaves for rescue (also chute time).

Pre-trip delay

The time between call receipt and the time the ambulance moves; pre-trip delay includes dispatching time plus preparation time.

EMS response Interval

The interval from the time the ambulance receives the notification to its arrival at the scene; if multiple ambulances are dispatched concurrently, the earliest arrival is applied.

Time on scene

The interval between the time the rescue team arrives at the scene and the time it leaves the scene.

Patient access time

Measured from the arrival of the ambulance at the incident site to the time the team contact the patient.

Door to doctor interval

The time between Arrival at EM department to Hospital staff takes over.

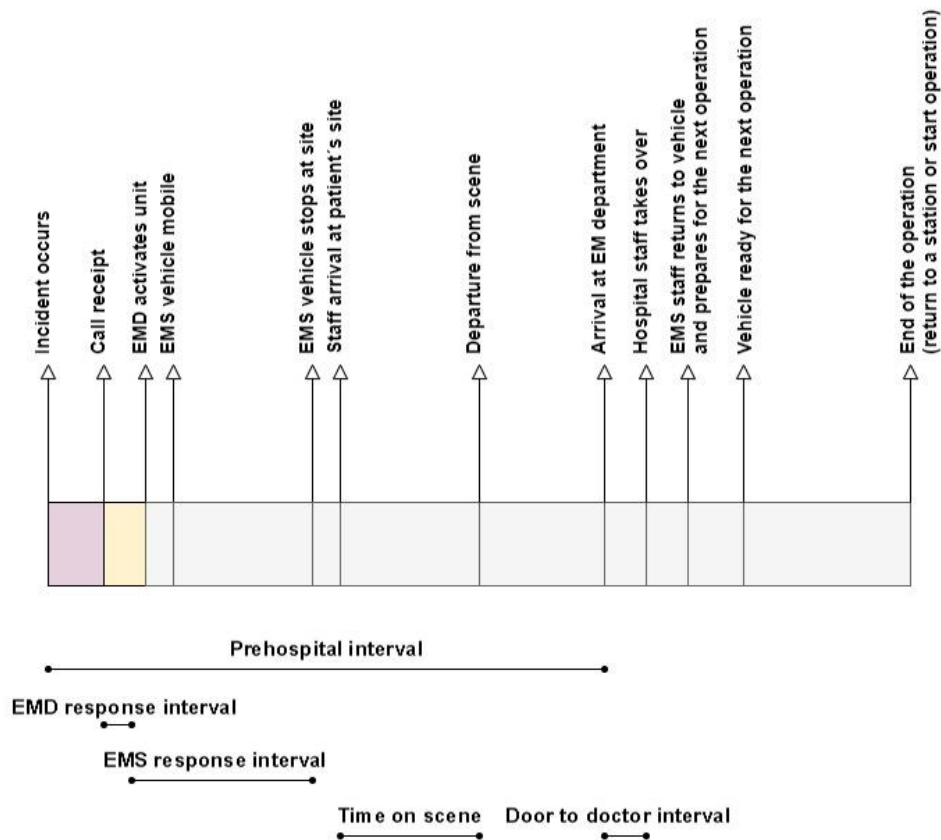
Drop-off time

The time spent by the rescue team in a hospital transferring the patient to hospital staff, cleaning and resupplying the vehicle; interval from the Arrival at EM department till Vehicle ready for the next operation.

Travel time

The interval from the time the ambulance receives the notification to the contact with the patient (definition valid to 2020).

The interval from the time the ambulance starts driving to its arrival at the scene (definition valid from 2021).



EMD Emergency Medical Dispatch; EMS Emergency Medical System, EM Emergency

M. Castrén, R. Karlsten, F. Lippert et al. Recommended guidelines for reporting on emergency medical dispatch when conducting research in emergency medicine: the Utstein style. Resuscitation. 2008 Nov;79(2):193-7. E-pub 2008 Sep 20.

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Technical Terminology

Base vehicle

Any vehicle which is used at the initial stage of a conversion (modification), necessary for the vehicle to operate as a road ambulance.

Conversion

Modification of a base vehicle characteristics and installation of special devices, such as warning lights, so that vehicle is suitable to be used as road ambulance and fulfils applicable legislation (such as EN 1789).

Electric power consumption

Sum of el. power consumption of all electrically driven devices & consumers installed on board of a road ambulance. Power consumption is usually measured in units of watts (W) or kilowatts (kW).

Electric Vehicle (Battery Electric Vehicle – BEV)

An all-electric vehicle, powered exclusively by a battery-operated electric motor, which is charged via the power grid, hence does not require any fossil fuel. This means that the vehicle is 100% emission-free.

Electric vehicle range

Is a distance an electric vehicle can travel on a single charge before the battery needs to be recharged.

EN 1789

European Standard 1789 “Medical vehicles and their equipment - Road ambulances” specifies requirements for the design, testing, performance and equipping of road ambulances used for the transport, monitoring, treatment, and care of patients. It contains requirements for the patient’s compartment in terms of the working environment, ergonomic design and the safety of the crew and patients.

Homologation (of conversion)

Homologation is the process of granting the approval by an official authority, to ensure the vehicle/converted vehicle meets applicable regulations, directives, safety demands.

HVAC system

HVAC (Heating, Ventilation and Air Conditioning) is the term used to describe a system that can be used to heat and cool the vehicle, as well as provide improved interior air quality.

ICE vehicle (ICEV)

Vehicle that is powered by a regular internal combustion engine (ICE). ICEV uses fuels derived from fossil fuels (petrol or diesel).

Maximum allowed weight - GVW

The maximum allowed weight (also known as gross vehicle weight – GVW) is the maximum operating weight of a vehicle as specified by the manufacturer, including the vehicle's chassis, body, engine, engine fluids, fuel, accessories, driver, passengers, and any cargo.

Patient compartment

Interior section of a road ambulance for patient treatment and/or transport.

Payload (vehicle payload capacity)

Payload capacity is the maximum amount of weight the vehicle has been constructed and is homologated to safely carry. Payload is the combined weight of everything in the vehicle, including passengers. Payload is also defined as a difference between max. allowed weight and weight in running order.

Vehicle weight in running order

Weight of the standard empty vehicle with factory-installed equipment plus a driver (75kg), all lubricants (such as oils and coolants), spare wheel, the onboard toolset, and the fuel tank filled to 90 per cent.

WLTP

WLTP (Worldwide Harmonised Light Vehicle Test Procedure) is the test set out by European regulators to work out the fuel efficiency or range of electric vehicle that manufacturers must abide by. WLTP test was introduced in 2017 with an ambition to make car fuel efficiency and electric vehicle range estimates more accurate and more representative of real-world driving.

Financial Terminology

Budget

A financial plan, estimate of revenue and expenses for a particular business or entity during a given period of time in the future.

Earnings Before Interest Tax Depreciation and Amortization (EBITDA)

Frequently used metric of financial effectivity of a business, alternative measure of profitability to net income. It aims to show cash profit generated by company core operations.

EMS financing setup in Slovakia

In Slovakia, EMS providers have two main streams of income: regular monthly payment for EMS station based on its type (doctor or paramedic) and payment per kilometer (9:1 ratio on average). Payment levels are determined by Ministry of health and paid by health insurance companies.

Key Performance Indicators (KPIs)

Measurable and quantifiable metrics of company's performance in financial, operational and other areas. They are used to keep track on actual values compared with target values and resolve differences in order to achieve desired goals.

Liquidity

In general ability of an asset to be converted into cash, in business ability of a company to meet its financial obligations, i.e. pay its vendors, employees and other stakeholders on time.

Return on Investment (ROI)

Popular performance metric used to assess profitability of an investment by comparing its total value and costs. Its advantages are simple calculation and interpretation for wide range of projects.

Legal Terminology

Act

A generally binding legal regulation adopted by the Parliament (National Council of the Slovak Republic), which must comply with the Constitution, with constitutional Acts and with international treaties to which the National Council of the Slovak Republic has given its consent and which have been ratified and promulgated in the manner prescribed by law.

Bulletin

A departmental publication tool in which ministries publish measures and decrees.

Detention room

Alcohol detention room in which persons who show signs of having consumed alcoholic beverages and, as a result, are a public nuisance or a danger to themselves, their family or other persons, public order or property are placed for a period until the alcoholic intoxication has passed.

EMS provider

Entity which, on the basis of a permit, operates a health care facility for outpatient health care - an EMS ambulance.

ETN

European technical standard.

Event

A sport, cultural or other event with spectators or participants at which it is necessary or desirable to ensure their health and safety.

Expert guidance

A legal regulation by which the Ministry of Health of the Slovak Republic provides professional guidance on the provision of health care.

Factory

An industrial facility, the operation of which poses a high risk of damage to health.

Government Regulation

A generally binding legal regulation issued by the government to implement an Act and within the limits of an Act, which the government is authorized to issue even without express statutory authorization.

Hospital

Inpatient health care facility.

Measure, decree

A generally binding legal regulation of ministries and other central government bodies of the Slovak Republic to implement an Act, which a ministry or other government body is authorized to issue only if it has been expressly authorized by Parliament in an Act to issue a generally binding legal regulation to implement an Act, if it concerns a narrow or specified group of persons or if a special Act so provides.

Ordinance

A generally binding legal regulation of ministries and other central government bodies of the Slovak Republic to implement an Act, which a ministry or other government body is authorized to issue only if it has been expressly empowered by Parliament in an Act to issue a generally binding legal regulation to implement an Act.

Patient

A person receiving healthcare, including transport.

PTS provider

Entity which, on the basis of a permit, operates a health care facility for outpatient health care - a PTS ambulance.

Repatriation

Transportation of a patient to or from the territory of the Slovak Republic by an EMS ambulance or a PTS ambulance.

STN

Slovak technical standard.

Technical break

A period during which an ambulance and its crew are unable to perform their tasks, most often due to unexpected and unforeseen circumstances.

Technical standard

A regulation that establishes the most advantageous solution to a recurring task, developed, negotiated, approved, and promulgated according to the regulations on technical standardization.

Tender

Tender procedure for the issue of a permit to operate an EMS ambulance.