



Set-piece approach for medical teams managing emergencies in sport: introducing the FIFA Poster for Emergency Action Planning (PEAP)

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‘Does your colleague know what to do on the pitch in case of a medical emergency? Do you?’ When traumatic and non-traumatic emergencies in football (soccer) occur, it is imperative that the healthcare professionals responsible for players are trained and equipped to recognise and provide appropriate care.¹

To support and promote a consistent level of emergency medical care on the football field, reduce errors and limit human errors, the Fédération Internationale de Football Association (FIFA) proposes a standardised protocol for medical teams managing emergencies in sport: the Poster for Emergency Action Planning (PEAP).²

The FIFA PEAP (figure 1) illustrates a process by which medical teams organise themselves to deliver prioritised care in emergency scenarios and minimises the risks that are inherent when working in the complex and often publicly viewed prehospital environment of competitive football. By linking key clinical interventions with predetermined roles, the PEAP helps teams manage the challenging human factors inherent in a time-critical emergency on the field of play. Importantly, the FIFA PEAP moves away from the more traditional reactive

team dynamics to a more proactive team preparation model.

PROACTIVE TEAM BEHAVIOUR: THE SET-PIECE

Regardless of where the emergency takes place, the clinical elements for recognising and managing a medical emergency or trauma remain the same. The football terminology of a ‘set-piece’ has been borrowed to describe the optimal process—where a team practises for a predicted scenario, with each member designated a role to perform and the accumulation of these roles leads to the goal.

Set-piece thinking permits optimal team performance by allowing each individual to remain task-focused without distraction. A team leader or ‘captain’ of the medical team should be predesignated

and is ultimately responsible for coordinating the emergency response. This role can be assumed initially by the first responder (often the team doctor) who would perform the initial on-field assessment and begin management, before moving to a more hands-off role to coordinate the response, or hand over these responsibilities to a pre determined team leader (when they arrive on scene). Regardless of the clinical scenario, the process for the emergency response should not change, so time-critical and life-threatening clinical issues (such as sudden cardiac arrest or thoracic trauma) are not missed due to the prioritisation of more eye-catching issues (such as angulated fractures).

This scripted and reproducible process necessitates team practice and scenario-based training by the medical staff and designated responders to minimise stress and improve efficiency when called into action.³

TASK ALLOCATION

One of the major challenges in providing medical care for football is the inconsistency in resources available within venues. The FIFA PEAP aims to add a consistent approach that can be adopted by most multidisciplinary teams (MDTs) and defines the minimal clinical resources and associated skills required for each role.

The PEAP is designed for all stakeholders in football, in both competitions

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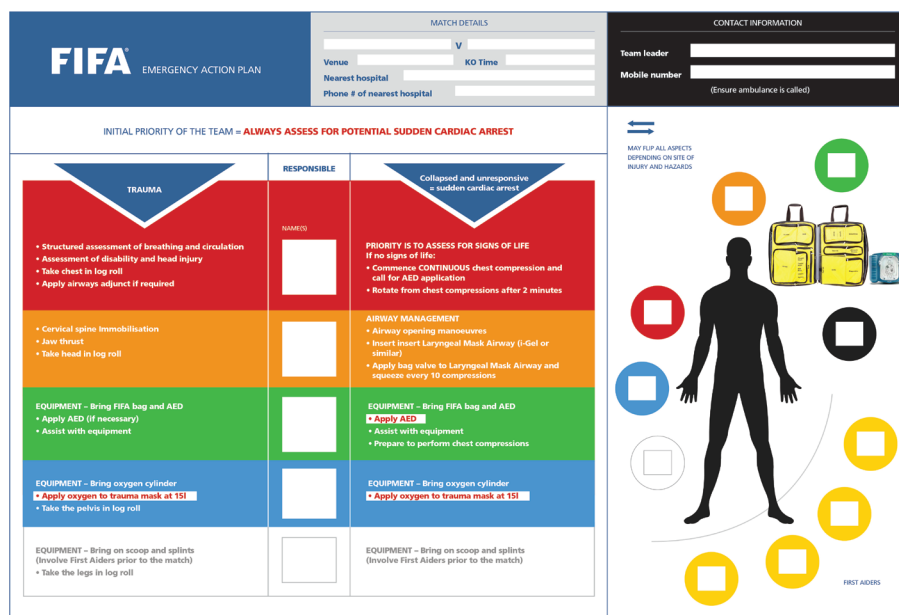


Figure 1 The FIFA Poster for Emergency Action Planning. The names of the person responsible should be entered into the coloured spaces. Each required role (colour) is described in detail in table 1. Please see (online supplemental figure 2) for more detail on the 2021 FIFA emergency bag, AED, automatic external defibrillator; FIFA, Fédération Internationale de Football Association.

Table 1 Team members and roles for the FIFA emergency action plan

Role	Skills	MDT member example	Responsibility
Team leader	Team coordination and communication Good understanding of clinical prioritisation in emergency care Clear situational awareness	Doctor Senior paramedic Nurse with the resuscitation leader role	If performing the initial assessment, move to "Hands Off" role when able: Should avoid becoming task-focused and only be involved in practical skills if absolutely required. Responsible for delegating key equipment to other roles (such as AED/medical gases/airway equipment). Responsible for coordinating the team, defining clinical priorities, and maintaining an overview. Responsible for garnering pertinent medical information relating to the patient, from the team medical staff.
Head/neck	Recognise potential cervical-spine injury and apply manual in-line stabilisation (MILS) techniques Perform airway management (or exchange with more qualified responder) in unconscious patients (including iGel LMA insertion in sudden cardiac arrest).	Doctor Physiotherapist Athletic trainer Paramedic EMT	Primary communicator with patient Cervical-spine MILS Airway management Leading team in log-roll or spine boarding technique.
Chest	Able to perform initial primary clinical assessment (ABCDE) Experienced in recognising sudden cardiac arrest or signs of significant injury Capable of performing basic airway manoeuvres and chest compressions	Doctor Paramedic EMT	Initial assessment (including starting as team leader while team assembles) Ensure safe airway and application of oxygen when required Start CPR Torso control in log-roll
Equipment	Understands the use and deployment of all medical equipment allocated to the team (although does not need to be skilled in its use) Able to carry relatively heavy resources to support the team	Paramedic EMT First Aiders/AHPs	Bring FIFA Bag and AED. Deployment of medical equipment in line with the clinical scenario Liaison with any other venue stretcher team personnel to assist the team leader in coordinating extrication Responsible for the safe clearance and removal of medical equipment from the field of play
Pelvis	Perform basic medical manual handling and assist clinicians in patient care Trained in the application of spinal immobilisation and patient movement equipment	EMT First Aiders/AHPs	Pelvic control in log-roll Assists with CPR (if trained) May be designated specific equipment to assist Head & Chest roles (AED/medical gases/airway equipment)
Legs	Perform basic medical manual handling and assist clinicians in patient care Trained in the application of spinal immobilisation and patient stabilisation equipment (such as spider straps and vacuum splints)	EMT First Aiders AHPs	Leg control in log-roll Assists with CPR (if trained) May be designated specific equipment to assist head/neck and chest roles (AED/medical gases/airway equipment)

AED, automated external defibrillator; AHP, allied health professionals; CPR, cardiopulmonary resuscitation; EMT, emergency medical technician; FIFA, Fédération Internationale de Football Association; LMA, laryngeal mask airway; MDT, multidisciplinary team.

to resuscitate and stabilise a patient and the skills required to deliver these procedures. This focus allows the integration of clinicians with emergency competencies (such as doctors, paramedics and nurses) and allied health professionals with other skills (such as physiotherapists, athletic trainers, sports therapists and first aiders) into a MDT.

PRACTISING TO PERFECTION

Within the PEAP, roles are allocated and practised prior to the deployment of the team so when an emergency takes place, team members are already aware of their role and responsibilities in the process. These are colour coded and represent the positions and responsibilities each member should take during a scenario—as described in figure 1. Each club may have personnel to fill each of these roles and practise their emergency response together before the start of the season. In some circumstances, the visiting team may require personnel from the home team to fill all roles. This should be determined before match day and role allocation should take place at the Prematch Medical Meeting (suggest 1 hour prior to kick-off) or in a pretraining briefing. As part of adopting the PEAP, teams should introduce time for this key communication or so-called ‘medical timeout’ into their regular preactivity routine.

CREATING STRONG TEAM COMMUNICATION

A synchronised, well-practised set-piece allows teams to work efficiently and without getting in each other’s way. However, the task-focused element of most team members’ roles places increasing importance on communication and the hands-off oversight of the team leader.

Communication within the team is key, allowing team members to feedback through the team leader who provides situational awareness and coordinates the set-piece. The team should practice closed-loop communication where the team member alerts the rest of the team via the team leader when each task is delivered.

It is inevitable that team communication and performance will be challenged by stressful, time-critical medical emergencies, and so the PEAP is designed as a reference document for use during team activity. All roles and communication channels should refer back to the FIFA PEAP as a tool to maintain clear team direction, organisation and leadership in times of stress.

and training. It is an umbrella process that is equally applicable to venues with already established high-functioning emergency

systems and those with more moderate resources. To achieve this, we have placed emphasis on the key interventions required

CONCLUSION

A medical emergency in football is a challenging and stressful situation for any clinician. To provide the most efficient response, to best prioritise care and optimise the medical team's performance, we recommend moving away from reactive team dynamics to a proactive team preparation model. The FIFA PEAP provides a structure by which any medical team supporting the field can deliver a reproducible system using a set-piece process to ensure optimal player care when a medical emergency presents itself.

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REFERENCES

- 1 Hanson JR, Carlin B. Sports prehospital-immediate care and spinal injury: not a car crash in sight. *Br J Sports Med* 2012;46:1097–101.
- 2 Rehberg RS. Sports emergency care: a team approach. *J Sports Sci Med* 2013;12.
- 3 Bleetman A, Sanusi S, Dale T, *et al.* Human factors and error prevention in emergency medicine. *Emerg Med J* 2012;29:389–93.