

CARDIAC CARE IN EMS

A close-up photograph showing an elderly person's wrinkled, aged hand being held and supported by a younger person's hand. The younger hand is positioned over the older hand, providing a sense of care and stability. The background is blurred, showing what appears to be a medical setting with blue scrubs.

Amy Kruger
Metro Are Ambulance

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Objectives

Review cardiac events
Review cardiac assessments and treatments
Improve the outcomes

Emergency Cardiac System

First, we'll discuss Pre-hospital cardiac system—why pre-hospital emergency care is necessary?

What are the components and what the overall system is.

Why do we
need set a
system?

Securing a Pre-Hospital Emergency system prevents delays in care that could increase the chance of survival.

The cardiac system should also follow evidence -based guidelines as well as up to date protocols in your area.

Why do we need prehospital care?

In a cardiac event, delays can cause major life alterations. The simple chest pain can turn for the worst, causing a cardiac arrest.

The light-headed dizziness that is actually a heart attack could lead to loss of consciousness or eventually death.

What is a Cardiac Event?

A cardiac event is one in which causes strain to the heart or can lead to death.

A myocardial Infarction or aka heart attack.

Some types of events:

Arrythmias

Heart valve disease

Cardiomyopathy

Blood Clots

Carotid or coronary artery disease are a few.

Shortness of Breath

Cardiac Arrest

Pre-hospital?

Yes.....

With the numbers we heard, this is why a system in place of Pre-Hospital care is necessary.

Each Ambulance service should have updated protocols for all events ranging from BLS to ALS and some even critical care.

Evidence Based Guidelines are showing a better chance of survival when EMS is utilized.

What can we do?

In the EMS system any patient with a potential for a cardiac event an EKG should be performed. This should be performed on scene, within minutes of arrival.

Performing an EKG rapidly with gaining a baseline set of vitals can help to determine an arrhythmia or Myocardial Infarction.

When the EKG is obtained and reviewed it can also be transmitted to the receiving facility allowing them to prepare for the patient coming in.

All of this can reduce delays of treatment.

Treating the patient

Doing a proper thorough assessment along with an EKG and vitals is necessary to determine if providing medications is appropriate before arriving at hospital.

Providing aspirin enroute may be necessary

Providing Nitroglycerin

Providing Oxygen

Preparing your patient for the possibility of the what is next.

BLS vs ALS

In many settings BLS is the available service and they will have done all the assessments and treatments if able as previous discussed. If ALS is present they can add into those treatments and help to prepare for the hospital.

Getting IV access should be considered and deciding what or if other medications should be considered.

After reviewing the EKG, do they need a right sided EKG?

All ALS providers should be up to date in ACLS and have up to date protocols to provide ACLS care.

Hospital alert

Its take some time to get here.....

It seems as calling 911 waiting for the ambulance, now they did a EKG and maybe gave some medications. Didn't this prolong the treatments and getting to the ER. The answer is no.

Delays

What can cause the delays????

A patient can feel weak and not get there, possibly losing sense of direction.

Possibility for a cardiac arrest to occur, again delaying treatments and possibility of death to occur.

Motor vehicle accident could happen.

Cardiac Arrest

Not every Cardiac Event leads to Cardiac Arrest.

Pre-hospital is and can help to increase the odds of survival even in Cardiac Arrest.

Following AHA and ACLS guideline help to improve outcomes.