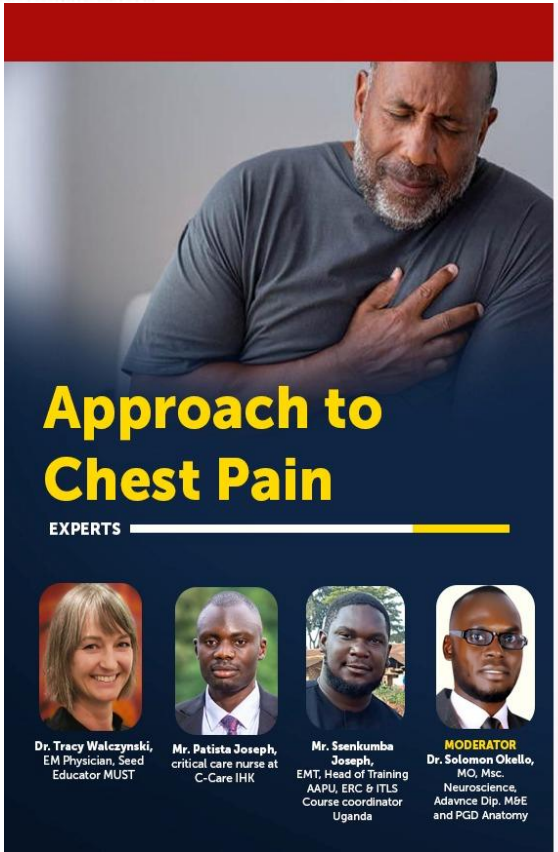
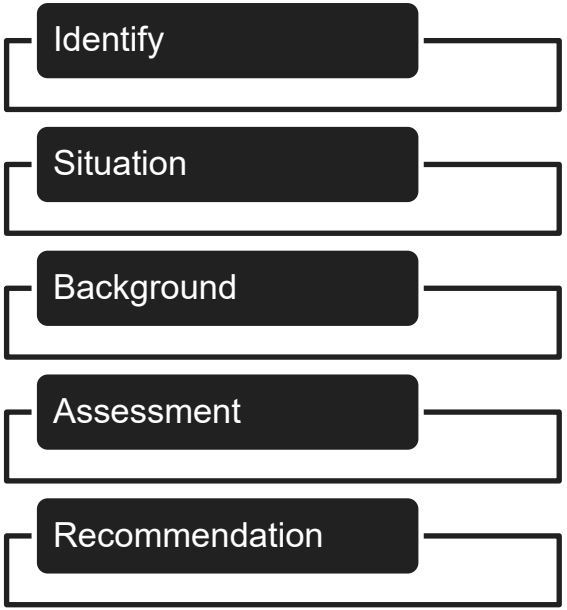
EMS ECHO Session 98



Prehospital team:

What do you need to prepare for pre-hospital care for this patient?

- Staff
- Patient
- Equipment / Medications
- Mode of transport
- Documentation/Handover



Staff on Ambulance –Patient with PE

The ideal ambulance staff includes a team with expertise in both critical care and respiratory emergencies.

- A physician,
- A critical care nurse, and a respiratory therapist, along with
- A qualified EMT with capability to offer Advanced Life support

If you cant get the physician physically you should atleast work under their medical direction on call

Equipment / Medications–Patient with PE

Some of the most important ambulance equipment and medications that may be used for a patient with pulmonary embolism:

A- OPA, NPA, LMA……. Endotracheal tube (ETT) and laryngoscope (for advanced airway management)

B- Oxygen tank and delivery system (e.g., nasal cannula, NRMs), Bag-valve-mask (BVM) device, Pulse oximeter for SPO2

C - Cardiac monitor EKG …Atleast 6lead ….12lead even better ,defibrillator (Manual or AED) ,Blood pressure monitor……mechanical CPR machine, IV fluids and accessories

D - Penlight torch , Glucometer

E- Thermometer, Blanket

Other things we often forget:

- ❑ **Medical equipment power & charging**
- ❑ **Air-condition functionality – Hi & Lo**
- ❑ **Appropriate PPE**
- ❑ **Safety box & Bin**
- ❑ **Possibility for a Hand wash facility**
- ❑ **Precision Light**
- ❑ **Functional stretcher bed**
- ❑ **FUEL**

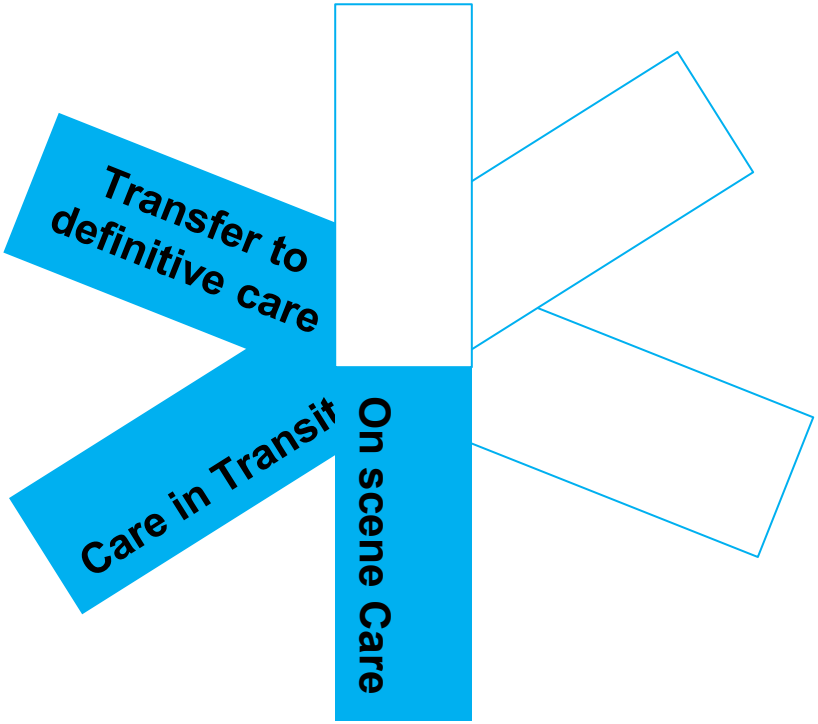
Key Medications:

- Oxygen,
- Paracetamol for pain management
- Heparin (for anticoagulation)
- Nitroglycerin (for potential cardiac ischemia or hypertension),
- Vasopressors (e.g., dopamine, norepinephrine) for hypotension,
- Cardiac arrest medications (e.g., epinephrine, amiodarone) if patient deteriorates to cardiac arrest

NB: Prehospital providers should follow local protocols and medical direction for specific medication administration

Mode of Transport–Patient with PE

The best ambulance option depends on the patient's stability and the distance to the receiving facility.
For stable patients, a ground ambulance with advanced life support (ALS) capabilities is often sufficient.
However, for critically ill patients or those needing specialized care, an air ambulance (fixed-wing or helicopter) may be necessary.



When we get to the patient with PE

Initial Assessment and Stabilization (ABCs):

•**Airway:** Look & listen

•Ensure a patent airway.

•**Breathing:** Look listen feel.

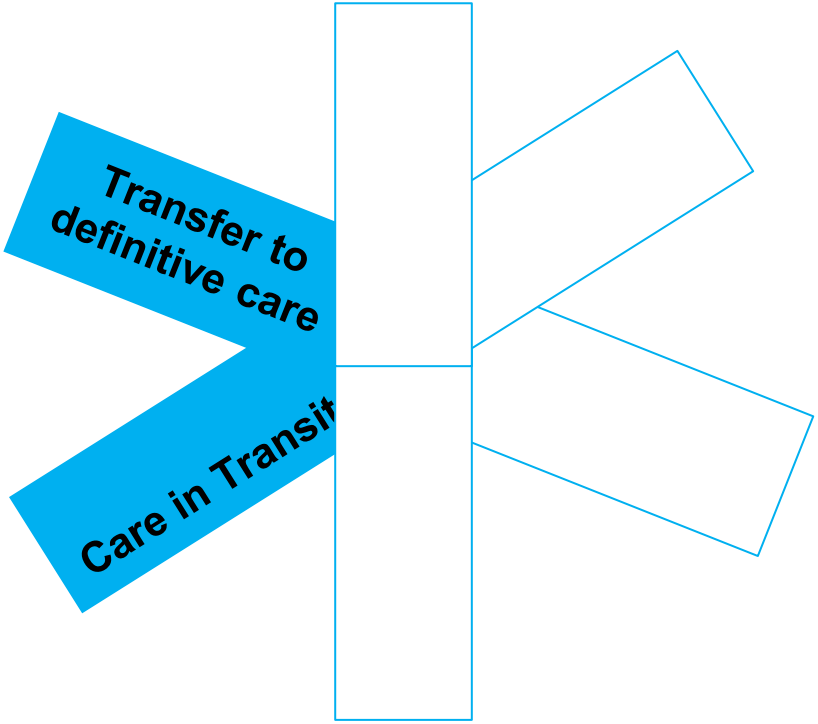
•Assess respiratory rate,Effort, Tidal volume etc Provide supplemental oxygen if needed and consider respiratory support

Circulation:

Monitor heart rate, blood pressure, and capillary refill time. Early ECG monitoring, Establish IV access, and consider fluid resuscitation if the patient is hypotensive.

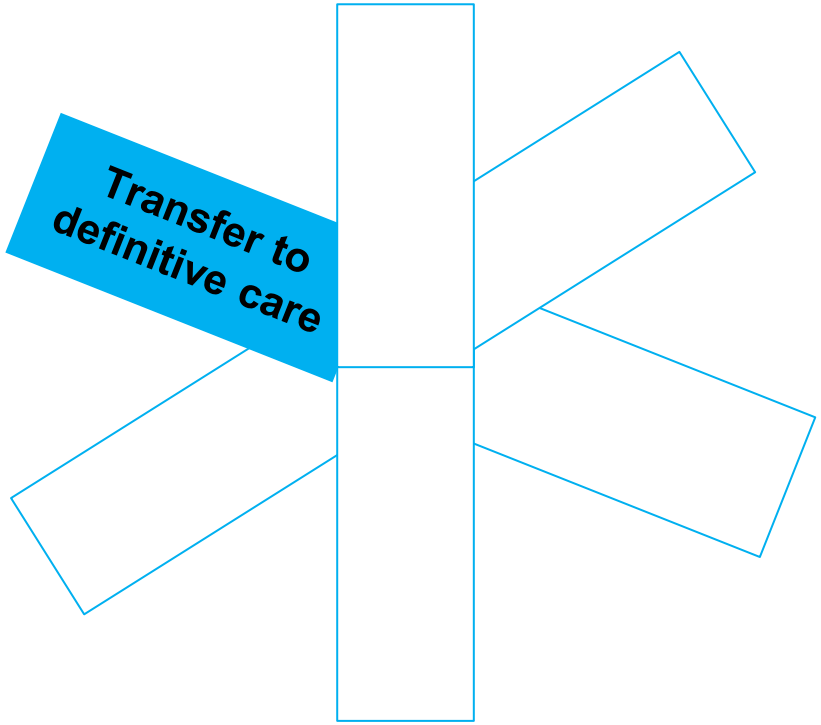
Administer other medication under MD

- **Check for AMS**…LOC GCS or AVPU , Pupillary reaction
- **Check for Blood glucose** ,
- **Maintain Temperature**



Care in transit

Perform continuous Assessment and Monitoring:
Hemodynamic Stability:
Closely monitor vital signs (blood pressure, heart rate, respiratory rate, oxygen saturation) throughout the transfer.
Oxygenation:
Provide supplemental oxygen as needed to maintain adequate oxygen saturation.
Cardiac Monitoring:
Continuous ECG monitoring is essential to detect any arrhythmias or changes in heart rhythm.
Pain Management:
Manage pain effectively, as it can exacerbate anxiety and respiratory distress.
Neurological Status:
Monitor for any changes in mental status or neurological function. **RECORD & REPORT ANY CHANGES!!!**



Transfer to definitive care

Communication: Communicate effectively with the receiving facility, including the patient's history, current condition, and any interventions performed

Choose high level facility with specialized care such as facility with cardiac catheterization laboratory, ICU bed and other services

Perform a proper Handover of the patient to the receiving facility. Verbal and written

Sample Handover for our patient in discussion today!

- Identify
- Situation
- Background
- Assessment
- Recommendation

I am Joseph Ssenkumba an EMT from AAPU bringing you a 58 year old Gladys who we picked from ..... She had a 3 days h/o sharp, right-sided chest pain and cough with progressive shortness of breath.
At the ED Gladys presented with hypoxemia, pain and fever with sighs of shock…….