## Intended Learning Outcomes

Develops competency in:
- The use of cardio pulmonary resuscitation
- The use of National Early Earning Scores
- The ABCDE approach to acute illness
- The use of the SBAR communication tool

## Narrative Description

At 15.00 h a man presents with a 30 minute history of severe chest pain and shortness of breath via ambulance to Medical Emergency Admission Unit (MEAU). In the ambulance GTN spray was administered which relieved the chest pain. The nurse has called the FY1s to review the patient as the chest pain has returned. The early warning score is 2.

The students should demonstrate the above competencies and manage ventricular fibrillation according to Guidelines.

## Faculty roles

- **Facilitator**
- **Nurse**
- **Arrest Team**
- **Support in debrief room during live feed of scenario**
- **Technician**

## Student roles

- **FY1 x 3**
### Equipment

<table>
<thead>
<tr>
<th>Manikin set-up</th>
<th>Male in clothes, supine, monitoring attached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor set-up</td>
<td>3 wave set up, large numbers</td>
</tr>
<tr>
<td>Drugs</td>
<td>Emergency drug box</td>
</tr>
<tr>
<td>Essential medical equipment</td>
<td>NEWS chart, prescription chart</td>
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<tr>
<td></td>
<td>Oxygen mask with reservoir bag</td>
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<td></td>
<td>IV cannulas</td>
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<tr>
<td></td>
<td>Fluids</td>
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<td></td>
<td>Stethoscope</td>
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<td>Resuscitation trolley</td>
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<td>Airway trolley</td>
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| Test results                 | ECG, ABG, CXR                               |

### Computer set up for patient monitor manual run – monitoring connected

### Initial vital signs

| SpO₂ : 94 %                  | Respiratory rate: 12/min                   |
| Heart rate: 70 bt/min        | BP: 110/60                                  |
|                              | Temp: 36.5°C                                |

### Changes to vital signs

1. **Trigger** whilst taking verbal history from patient
   - **Change**: SpO₂ : 0%
   - Respiratory rate: 0/min
   - Heart rate: 0 bt/min
   - Heart rhythm: Ventricular Fibrillation
   - BP: 0 mmHg
   - Temp: 36.5°C

2. **Trigger** 1st shock
   - **Change**: Heart rate 0 bt/min
   - Heart rhythm: Ventricular Fibrillation
3. Trigger  2nd shock

**Change:**  SpO₂: 94%
Respiratory rate: 10/min
Heart rate: 100 bt/min
BP: 100/60 mmHg    Temp: 36.5°C

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**Student Brief**

You are FY1s in MEAU. A nurse has called you to review a patient. The nurse is concerned about Mr Francis who was admitted for observation following an episode of chest pain which was relieved with GTN spray whilst in the ambulance. Mr Francis is accompanied by his wife.

The patient is:

- 76 yrs old
- PMHx: Coronary heart disease, known atrial fibrillation, arthritis
- Medications: Digoxin PO 125 micrograms OD, Atenolol PO 50 mg OD, Simvastatin PO 40 mg OD, Warfarin PO as per INR, Paracetamol PO 1g PRN

Please assess this patient and treat/refer as you see fit.

**Scenario Description**

- As you approach the patient, he becomes unconscious. Wife is present

- **History from nurse:**
  - Patient has just reported that chest pain has returned
  - The nurse prompts that the patient has become unresponsive, and the heart rhythm has altered, if prompted suggest it is Ventricular Fibrillation
  - If requested CRT = 4 s. Blood glucose 3.5 mmols/l

- **History from wife:**
  - This episode of chest pain came on about 1 hr ago
  - “He said it was a really awful crushing pain. I had to call the ambulance, as didn’t know what to do. What’s going on? Is he going to be alright?”

- **The students should demonstrate the following:**
  - Check patient confirm unresponsive
  - Call for help
  - Apply head tilt / chin lift or jaw thrust
  - Confirm no breathing
  - Call for cardiac arrest team and ward defibrillator
  - Insert oropharyngeal airway
Commence CPR 30:2 with pocket mask attached to high flow oxygen
Once defibrillator arrives attach defibrillator pads and note shockable rhythm
Deliver 1st shock
Continue 2 min CPR 30:2
Commence IV fluids
At 2 minutes confirm rhythm note shockable rhythm / no signs of life
Deliver 2nd shock
Patient converts to spontaneous circulation, breathing and responsive
Stop CPR
Resuscitation team arrive

- **Students should demonstrate** CPR, ABCDE approach in parallel with diagnostic synthesis by targeted history and examination

- **Demonstrate SBAR handover to first responding member of resuscitation team.**
  - Wants full SBAR with current vital signs
  - To suggest patient is transferred to resuscitation bay, MEAU

- RR, HR and BP parameters improve following 2nd shock and high flow oxygen

- Scenario ends when handover given to first responding member of resuscitation team

### Exit Strategies

Resuscitation team arrives and directs care

### Debrief

Students perception
Instructors perception
Learning points
Open for wider discussion
Close

### Essential Reading

Resuscitation Council Guidelines, October 2010