SIMulatED RDH Emergency Department - Author:

# Scenario Run Sheet: Emergency Buzzer Mayhem

## Learning Objectives

**Target Group: ED Regs and Consultants**

**General:**

**CRM – communication/task allocation**

**Scenario Specific:**

* **Assessment of the undifferentiated arrest**
* **ALS Algorithm**
* **Charge and Check/COACH Defib Script**
* **Post ROSC considerations**

## Scenario Overview

**Brief Summary: The Emergency Buzzer goes off in resus. Patient brought in by a friend, has just been walked into resus as looks “sick” He was unable to give much history, is confused and complaining of chest pain. Initial obs show hypotension, tachycardia**

**On arrival into resus he arrests as soon as on the bed and the nurse hits the arrest buzzer. Patient has evidence of recent cardiac surgery – sternotomy wound that looks partially healed.**

**Arrest team arrive to manage the cardiac arrest!**

|  |  |  |  |
| --- | --- | --- | --- |
| Intro Time | Scenario Time | Debrief Time | Soundbite |
| 10 mins | **20mins** | **20mins** | **10mins** |

## Observers’ Engagement Task

List all of the causes of cardiac arrest that you think of as the SIM progresses.

## Equipment Checklist

|  |  |
| --- | --- |
| **Mannikin:** | Mega Code Kelly |
| **Monitoring:** | iSimulate/**Live Defib** |
| **Docs and Forms** | EDNA, Green sheet, Vent sheet |
| **Equipment** | IV Pumps, Syringe Driver, USS, Oxylog, Defib |
| **Consumables** | Usual Meds |
| **Medications** | Adrenaline/Calcium/Amiodarone/ |

|  |  |
| --- | --- |
| **Sim Prompts** | CXR, Other Xray, USS, 12 Lead, VBGs, Other: |
| **Sim Equipment** | Fluid receiver |
|  |  |

## Participants

**Staff**

3 docs, 3 nurses, 1 PCA

**Instructor Roles**

Ensure no one gets shocked!

Provide results

## Additional Information/Medical History

**Demographics: 52M Caucasian**

**HPC: Recent CABG 2 months ago in Adelaide**

**PMH: IHD, CKD2, DM, Lipids and HTN**

## Proposed Scenario Progression

One of CNEs as confederate has just walked the man into resus and put him on the bed – scenario starts with them handing him over to the nurse in resus (SIM participant). Rest of the team are in the CNE office in quarantine till the arrest buzzer goes off.

Immediate commencement of ALS protocol

Identify that a shockable rhythm and give shock as soon as pads attached

Can consider stacked shocks – although technically not actually monitored at the time could argue that patient may benefit

Charge and Check/COACH

Good quality CPR/minimise hands off time/no immediate pulse check post shock/safe defib etc

Adrenaline after 2nd shock then every 3-5 mins

Amiodarone after 3rd shock

**Consider**

* Provide 100% O2 +/- definitive airway
  + Given that BVM effective/LMA appropriate not necessary to intubate
* IV Fluids for potential hypovolaemia

Electolytes

* + Will take 3 mins to get a VBG that shows K 6.0
  + Administer bicarbonate and Calcium Gluconate
* Temperature check
  + 35.6 – not low enough to be a contributing factor
* Tamponade and tension
  + Can look for signs of recent surgery (sternotomy scar)
  + USS
* Thromboembolism
  + High risk due to recent surgery but not a candidate for
* Toxic
  + ?collateral
* Ischaemia
* Check BSL

There are no obvious causes, aside from mild hyperK, when all of the above have been considered. Once a minimum of 5 shocks been delivered they will get ROSC

(the actual cause in the patient is meant to be graft thrombosis and ischaemia)

(Some clever person might suggest sequential double defibrillation! – only 1 defib available)

**ROSC (will only be a very shock post ROSC period)**

Consider A-D check/oxygenation/normocarbia/normthermia or mild hypothermia/fluids and inotropes/neuroprotective strategy/?PCI/ICU/Lines/NG/IDC/Electrolytes/Family etc etc

## Scenario Preparation/Baseline Parameters

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Stage 1** | Progression Trigger  Arrested | **Stage 2** | Progression Trigger  ROSC | **Stage 3** |
| **RR** | 14 | As per BVM | 12 shallow |
| **SpO2** | 91% RA | Unrec | 89% RA 94% O2 |
| **HR/Rhythm** | 130 | WCT 140 ?VT | 150 wide |
| **BP** | 90/70 | Unrec | 90/50 |
| **T** | 36.1 | 36.1 | 36.1 |
| **Other** | GCS 12 | GCS 3 | GCS 6 |
|  |  |  |  |

## Debriefing/Guided Reflection Overview

|  |  |
| --- | --- |
| **Opening Gambit** | **Anticipated themes:** |
| **Exploration with key players** |  |
| **Engaging the general group** |  |
| **Sharing facilitator’s thoughts** |  |
| **Any other questions or issues to discuss?** |  |
| **Summary** |  |

## The Soundbite

To follow

General Feedback Prompts/Examples:

Opening Gambit:

* What did you feel were your specific challenges there?
* Let’s talk.
* Can you describe to me what was happening to the patient during that scenario?
* Can you describe to me what was going on?
* What was important to you in choosing to manage that situation?
* Can you tell me what your plan was and to what extent that went according to plan?
* That seemed to me to go smoothly, what was your impression?
* That looked pretty tough. Shall we see if we can work out together what was going on there so that you can find a way to avoid that situation in the future?

Exploration with key players

* Questions to deepen thinking
* Questions to widen conversation
* Introduce new concepts; challenge perceptions; listen and build
* So what you’re saying is…
* Can you expand on…
* Can you explain what you meant by…
* When you said…
* I noticed that you…

Engaging the general group

* Let’s check with the rest of the group how they reacted to you saying that.
* Did you [scenario participants/observers] feel the same?
* What did you [scenario participants/observers] want from [scenario participant] at that point?
* What ideas or suggestions has anyone else got for how to deal with that situation?

Sharing facilitator’s thoughts

* Use advocacy with inquiry to share your observations and explore their perception
* What does the protocol say on…..
* What do you think was happening ….?
* How do you think … would respond to…. ?
* What about next time…..?
* Do you think there’s anything to be gained from…?

Any other questions or issues to discuss?

Summary