**Simulation objectives**

*By the end of the simulation participants will have:*

1. *Practise primary and secondary survey*
2. *Practice a completed respiratory assessment*
3. *Identify the deteriorating patient who is SOB*
4. *Practiced implementing appropriate treatment and escalation of care*
5. *Practised BLS or Advanced Life Support guidelines for management of a patient in a medical emergency using a simulator manikin.*
6. *Practise team behaviours in a simulated crisis situation.*
7. *Discuss factors that influence the successful functioning of a team in a crisis situation.*

**Scenario Design**

**Case History**

Patient Details

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| **Patient Details –Kath** |
| Sex | Female (Greek background) |
| Age | 56 |
| Past History | Morbid obesity (weight = 124kg), Type 2 diabetes, hypertension (normal blood pressure 150/85mmHg),asthma & CCF  |
| Current medications | Her medications include anti-hypertensive, a cholesterol lowering agent and oral hypoglycaemic drugs and a diuretic Kath also uses a bronchodilator puffer as required. She has been using her puffer more often. |
| Social History | Widow lives alone. 4 children who are very close to her. All married. 8 grandchildren. Kath has a complex social history, and presents to the Emergency Department several times per year. |
| History of Present illness | She has been using her puffer more often. Kath has noticed swelling in her ankles lately |
| Presenting symptoms | On admission her observations were: respiratory rate 18; Oxygen saturation by pulse oximetry (SpO2) 96%; blood pressure 146/80; heart rate 96 |

**Role Plays**

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| **Faculty Role Play –Senior Nurse** |
| You are a competent senior nurse with current resuscitation skills and experience. You are very efficient at performing assessments and understand expected management. You follow instructions from the doctors when given, but can also initiate care appropriately. You are able to perform the duties of an airway nurse with efficiency and predict what may occur. You prompt the doctor and nursing staff when you see that he/she is not really coping.You and the graduate nurse have taken handover and being your initial assessment and documentation of the patient. You make the decision when to call the doctor.  |

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| **Role Play – Division 2 Nurse** |
| You are a Division 2 nurse who has just completed the medication endorsement and IV administration courses. You are familiar with the environment and the ward policies and procedures. You know your team members well and have excellent time management and organisational skills. |

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| **Role Play –Graduate Nurse** |
| You are a keen bright nurse in your sixth month of your graduate year. This is only your second shift. You are keen, but your level of knowledge is in it developing stage.You and the senior nurse have taken handover and being your initial assessment and documentation of the patient |

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| **Role Play –General Practitioner** |
| You are a capable doctor having worked in family medicine for the past 20 years. You take control of the situation. You are well organised in your approach and competent with airway management skills. You do not enter until you are paged that you are required to attend. |

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| **Role Play –Kath’s sister (facilitator)** |
| You arrive when the doctor arrives and you become angry and start demanding what is going on.  |

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| **State 1.** |  |  |  |
| **Kath** | **Baseline State** | **Expected Interventions from participants** | **Time frame** |
| Kath states that she feels unwell and tired. She says her chest is tight and you can hear her work of breathing. She has no chest pain | HR – 96BP – 146/80SR – PVCSpO2 94%RR 24Chest sounds: Fine crackles low volume to begin with (vol 3) | ABCDEFGSit Kath upright6-8l oxygen via Hudson maskApply monitoringSpO2, BP, Resps**They should notice the IV is going too fast and stop it or at least decrease it** | 5 mins**If they don’t put on oxygen or sit her up, then go to state 2 after 3 minutes** |
| **For State 1 above, just keep repeating the following...****‘I don’t feel well’****‘I can’t get enough air’****‘My chest is tight’****If they ask you if you have chest pain, say...’No, but my chest feels tight’.**‘**Where’s my sister’?** |
| **State 2.** |  |  |  |
| Kath can only speak in short sentencesSweatyChest is tight and pain on inspiration 2/10Pitting Oedema in lower legs & sacrum | HR –120BP – 130/80Sinus TachycardiaSpO2 93%RR 29Chest sounds: Fine crackles low volume to begin with (vol 6)Escalation of Agitated, anxious | Reassure KathIncrease oxygen flow via a simple mask to 10-15LSit Kath Upright Administer nebuliser (this does not resolve escalating decline).Conduct a further set of observationsCall for a clinical review (depending on facility protocol of MO to contact)Commence secondary survey/ABG’s/Troponin/FBE/U’s &E’s | 5 mins**If they call the Doctor, they will received orders for:****Lasix 80 mg IV, Hydrocortisone 100 mg IV, Morphine 2.5-5 mg IV prn and GTN patch 0.4 mg/hr** |
| **For state 2 above, repeat the following:****‘I...can’t...breathe... in short sharp one word answers with breaths in between words****If they ask how your chest pain is, say... ‘my... chest... hurts’****‘Help me... I can’t breathe’ (in a loud distressed broken voice)****‘Where’s Ula’? (her sister)...’Is the...... doctor coming’?****‘Hurry’!!!** |
| **State 3.** |  | Handover here (swap groups) |  |
| Kath is leaning forward, clutching at her chest is unable to speak in sentences, she is using her accessory muscles to breath | HR –138BP – 120/70Sinus TachycardiaSpO2 90%Chest sounds: Increase volume to 9RR 36Escalation of Agitated, anxious***If they do not administer Oxygen >10 lmp, lasix or morphine, then Kath will arrest…go to straight to state 6a, otherwise go to stage 4*** | MET call (confederate becomes the MO or one of the participants)Continue oxygen and lung auscultationEstablish an IV for Lasix and morphineArrange for a chest x-rayCommence 5 min observationsECG monitoringContinue administering drugsConsider CPAP | 5 mins |
| **For state 3 above, only one word answers with heavy heavy breathing sounds****‘Help’** |
| **State 4.** | **Only if there is time will we bring in Sally (Kath’s sister)** |
| Kath’s sister enters the room and becomes angry at the amount of people attending her sister. She is extremely aggressive  | HR –140BP – 115/60St – PVCSpO2 92%RR 34Still Agitation, anxious especially with sister present | One member needs to attend the sister to explore her concerns and answer any questions, provide reassurance and support with regular updates | 3 mins**USE THIS SECTION ONLY IF TIME PERMITS** |
| **For state 4 above...‘Ula’!** |
| **State 5.**  |
| Kath is responding better and answering questions in single words | HR –135BP – 118/62Sinus TachycardiaSpO294%RR28/minCourse crackles to both lung basesDecreased level of consciousness | The registrar determines from her history that Kath is in APOLasix and morphine slowly resolves condition. Registrar considers that Kath may need admission to a high dependence Unit or transfer to larger hospital (depending on health service) and communicates this with the team | 3-5minsScenario comes to a close**Will need to organise transfer** |
| **For state 5 above...moan and groan...’aaaaaauuuuuggggghhhhh’** |

**From state 3...If they do not administer > 10 lpm Oxygen, Lasix and morphine then Kath arrests...follow the table below:**

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| **State 6a** | **If participants do not do a primary survey, apply oxygen on at least 10 lpm or sit patient up then...** |  |
| Kath stops breathing | VTNo blood pressureNo respirationsNo oxygen saturations | If not already done, a code blue is calledDRABCDGood compressionsBag and mask with 100% oxygenAttaching defibrillator and defibrillating | 3 mins |
| Kath spits out her guedals airway | Sinus Bradycardia with VEB’s 55/min.BP 76/45 mmHg | Continue CPR for another 2 minutes**If they perform correct ALS and defibrillate, then she converts to sinus bradycardia at 55/min.**May administer atropine if they get a medical order. | 2 minutes |
|  | EMD | **If they don’t check for a carotid pulse, them put Kath into electrical mechanical dissociation** | If time permits |
| Kath starts waking up asking what happenned | Sinus rhythm 88/minBP 105/60 mmHgSats 90%Respirations 18/min |  |  |
| **‘What happenned’?**‘**Where am I’?****‘Let me out of here’** |

**Final**

Debrief and Review learning outcomes

**Reflection / Debriefing (30 mins)**

**All participants are to sit in a circle.**

*Debriefing is extremely important in clarifying and consolidating the learning gained from the simulation experience yet is still challenging. Participants should not feel as if they have failed this is practice! Participants are to be reminded not to discuss each other’s performance out of class; they are here to support and respect each other.*

**Cathy**

Begin by asking each and every participant how they felt about the simulation experience, how did it feel? Ask for a short answer.

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**Therese (This is the largest part of the debriefing process)**

 Ask the student group what happened in the simulation and then guide them if they are on the wrong track. We are to focus on nursing care, assessments and procedures not on the pathophysiology of the patient’s condition at this stage.

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**Consider the Clinical reasoning process**

* Collecting cues – What signs and symptoms did the patient exhibit?
* Were you able to competently assess the patient?
* Analysing the cues – What do these S & S mean?
* Were you able to call for help at the appropriate time?
* Why would the patient be experiencing APO
* Making a decision - What actions did you take and why?
* What is the action of Frusemide?
* Evaluating care - What happened to the patient after administration of the medication?

**Also think about**

* Medication skills
* Assessment skills
* Communication skills with the patient and the team
* Technical skills
* 3. What areas would you do differently next time?
* 4. What is one take home message from this session?

**Cathy**

**Ask the participants to each identify one area that went well.**

*Opportunity to use Pendleton’s feedback model or an advocacy, concern, enquiry type questioning. Depending what you are comfortable with*.

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**What could have been done differently next time?”**

**Therese**

Finish by highlighting area’s students need to practice or improve upon then finish on a positive note

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Ask each participant to Identifying own learning objectives or take home message