

STATION 1

SIM: Local Anaesthetic Toxicity/Cardiac Arrest

Double Station

3 Mins Reading Time

Up to 17 Mins Simulation

Stop 3 mins before end of SIM for Candidate to describe the refer the patient to an ICU colleague

Participants:

1x RMO (actor)

1x ED Reg

Confederate – to relay examination findings/reguide scenario/provide VBG result/ask the candidate to refer the patient to ICU Consultant 3 mins before the end of the station

Candidate Instructions:

You are called to the resus room where an RMO is suturing a large 20cm thigh wound on a 45 year old female. She sustained this isolated injury when she fell off a ladder at home, she did not sustain a head injury. The nurse in charge has called to say that the patient has become acutely confused. In this scenario you are the team leader and will have 3 competent senior nurses and the RMO as your team. There will be a confederate in the room who will relay examination findings to you as appropriate. You are expected to be the TEAM LEADER in this scenario and will not be expected to perform any complex tasks yourself –your task is to direct your team. You may examine the patient yourself. **You MUST NOT intubate the patient during this scenario**

RMO Instructions

You are a junior RMO who has taken a patient into a resus room to suture a large leg laceration. You have injected 12 x 5ml 1% lignocaine vials . The patient was unmonitored and had no obs/iv access during the procedure. They became confused and complained of tingling in their face, before becoming unconscious. You weren't aware of the maximum dose of lignocaine and thought it was a "safe drug". She had no other injuries. You are able to insert a canula/do bloods/perform CPR if asked but have no basic airway skills.

Registrar Instructions

You heard there was an arrest and came to help. You do not know the case at all. You have all of the skills to do IV lines and drug administration/CPR/BVM and advanced airway mx. After the 2nd shock you should state *"theres a bit of a leak around the mask, and we're not ventilating as well as we could"*. This is to prompt the use of airway adjuncts if not already used

Nurse 1/2/3

You are all resus trained nurses – you can BVM/put in lines/do obs/draw up and give drugs and use the defibrillator. You should perform all tasks as you would do usually in resus. If you are asked to give a medication/fluid/shock and no dose is given you should ask for the dose to be clarified.

Confederate Instructions

- Tell the candidate what examination findings are present
 - Airway patient, no resps, Pulseless, GCS 3, U on AVPU, no signs of trauma
- After 4th Shock ROSC
 - at subsequent pulse check will be spont resp 10/min, groaning, moving limbs, wound on leg, no other abnormal findings
- Give patient VBG displaying HAGMA/Glucose 8.0 if requests
- If candidate starts to prepare for intubation then remind them that intubation is not permitted in this SIM
- Cease the scenario 2 minutes from the end and ask the candidate to

SIM Set Up

Equipment

- Adult Mannequin with simulated leg wound, unconscious on arrival
- ISIMulate
- Suture Trolley – set up to look like someone is about to suture after having injected LA ++++
- Dressing pack
 - Syringe and Needle
 - 12x empty 1% lignocaine vials
 - Suture material
 - Betadine
- Venepuncture and canulation equipment/blood tubes and VBG
- IV fluids NaCl 0.9% 1L bags
- Intralipid (simulated with milk in 100ml bag)
- Meds: Benzodiazepines/Sodium Bicarbonate
- Defibrillator
- Monitoring leads/pads
- O2
- BVM
- Guedel/NP
- Computer with access to AMH for drug doses

Mannequin/Observations/Monitor Set up

Initial obs/exam (arrested patient)

- Mannekin wearing underwear and upper half clothed, lying on bed
- No response to voice/pain/GCS3
- VF on monitor when attached
- Unrecordable sats/BP if taken
- Resps – zero
- No signs of trauma

- Wound on left thigh 20cm, not bleeding

ROSC Obs

P120

Wide complex SR

BP 70/50

Sats 90%

RR 10

Scenario Progression

- Patient unmonitored in resus bay
- RMO to state that she was complaining of tingling around her mouth and got really confused before she became unconscious
- Nurse in room to state that she has just stopped breathing
- Registrar arrives in the room
- DRSABC approach to assessment
- Identification of cardiac arrest by candidate – VF
- CRP: Ventilations established, shockable side of algorithm followed
- Each time rhythm check approaches should use a verbal prompt for example: *“Rhythm check approaching, compressions continue, free flowing oxygen away, charging, cease compressions, shockable rhythm, everyone and myself clear, shocking – delivers shock – recommence CPR and ventilations”*
- IV access gained/VBG/Glucose
- Consideration of 4H/4T's or statement that likely cause is toxicity to LA
- Administration of adrenaline every second cycle after 2nd shock
- Early administration of sodium bicarb boluses
- Consideration of intralipid therapy
- Airway person to state after 2nd shock: “I don't have a very good seal” with expectation that guedel airway inserted
- Administration of Amiodarone after 3rd shock
- After 4th shock rhythm changes back to sinus with wide complexes **IF BICARB has been administered, otherwise will remain in VF till given**
- Completion of 2 mins of CPR necessary prior to rhythm and pulse check
- Strong pulse present at rhythm check, pt is groaning
- Post ROSC care – O2/IV/obs/inotropes/ECG/Bloods/intralipid infusion/further HCO3 as reqd
- Consideration of disposition to ICU
- At 15mins the ICU consultant arrives and the scenario is stopped to allow a handover of information via ISBAR format

Introduces Self
Clarifies Situation –asks RMO/nurses
Assesses response to stimulus
Assesses airway
Assesses breathing – absent breathing
Institutes BVM ventilation

Assesses circulation – absent pulse
Institutes compressions (30:2 Ratio)
Cardiac Arrest Buzzer/Call/Announcement
Attaches cardiac monitor – correct pad position
Charges defib BEFORE rhythm check to minimise pauses in CPR
Identifies VF on monitor
Defibrillation at 200J AS SOON AS PADS APPLIED/RHYTHM ESTABLISHED
Demonstrates safe technique • All Clear • Oxygen Away
Minimises hands off time with correct verbal procedure/charging defib prior to rhythm check
Immediately resumes CPR 30:2
Inserts an IV line
Withdraws blood for VBG/glucose minimum
Makes statement regarding consideration of 4H/4T's
Identifies that LA toxicity most likely cause
Adrenaline 1mg post 2 nd shock
Amiodarone 5mg/kg post 3 rd shock
Considers the use of NaHCO3 Boluses
Considers the use of IntraLipid 100mls 20% then infusion. Can look up the dose
Considers fluid boluses 500-1000mls stat
Inserts guedel airway in response to nurses comment that "I don't have a very good seal"
Recognises rhythm change after 4 th shock - Sinus
Completes 2 mins of CPR regardless of rhythm change
Dumps defib charge prior to checking pulse when shockable
Identifies Pulse present
Institutes post resus care • ABCD examination • Obs • O2 via FM • IVF/access/bloods/VBG • Further HCO3/intralipid infusion as reqd • ECG • Discussion with family
Considers disposition to ICU
Referral to ICU Consultant

- | |
|---|
| <ul style="list-style-type: none">• Introduces self/clarifies who talking to• Situation• Background• Assessment• Response |
| <p>General Performance</p> <ul style="list-style-type: none">• Calm and in control• Gives clear instructions (e.g doses, tasking to specific people)• Use of closed loop communication• Consideration for staff (e.g CPR rotation for fatigue) |

OSCE Station 1

Venous Blood Gas

pH	7.10
pCO ₂	70
pO ₂	20
HCO ₃	15
Lact	7.0
BE	-9.0
Gluc	7.0
Creatinine	100

STATION: SIM LA Toxicity/Cardiac Arrest

Candidate Name:

Examiner Name:

COMPONENT ASSESSMENT

Select one option for each component

	Performing poorly and nowhere near the level of a new FACEM	Performing significantly below the level of a new FACEM	Performing below the level expected of a new FACEM	Borderline at the level of a new FACEM	Performs well at the level of a new FACEM	Performs very well/ above the level of new FACEM	Performs at an exceptional level way above that of a new FACEM
	Please rate ALL the following domains:						
Medical Expertise	☐	☐	☐	☐	☐	☐	☐
Communication	☐	☐	☐	☐	☐	☐	☐
Teamwork/Collaboration	☐	☐	☐	☐	☐	☐	☐
Leadership/Management	☐	☐	☐	☐	☐	☐	☐

DETAILED ASSESSMENT CRITERIA

Please use the following criteria to inform your ratings

Medical Expertise

- Assesses A, B, C rapidly and institutes BVM ventilation and CPR in ratio 30:2
- Doesn't give rescue breaths before CPR
- Attached defib quickly and assesses rhythm rapidly
- Correctly identifies ventricular fibrillation
- Shock x1 at 200J biphasic – Not stacked shocks as not on monitor when arrested
- Demonstrates safe defib technique
- Minimises hands off time with use of a pre-charge before rhythm check
- Ensures that charge is dumped when rhythm non shockable – ideally pre pulse check
- Continues with 2 mins of CRP when rhythm changes post shock
- Iv access
- Takes blood for VBG and BSL minimum
- Adrenaline 1mg Iv after 2nd shock, then alternate cycles
- Amiodarone 5mg.kg after 3rd shock
- Administers Intralipid bolus and infusion
- Administers bicarbonate boluses 50-100mls 8.4%
- Considers other causes 4H and 4T
- IV Fluid Bolus given

Leadership/Management

- Assumes the team leader role – Is obvious that has control of the situation
- Clarifies the current situation rapidly
- Redirects the team if the scenario becomes disorganised

Communication

- Introduces self to the team

STATION 2 : Communication

Paediatric Ketamine Sedation

Single Station: 3 Mins reading time, 7 minute role play

Participants

Examiner: Shane Tan (ASH DENT)

Actor: Vishal Kholi (Parent)

Set Up

Registrar Room

2 chairs facing each other

Scenario

A 4 year old boy was running around in the park when he caught his leg on a sharp nail sticking out from a fence. He has a deep laceration to his thigh that is amenable to cleaning, debridement and suture in ED.

The child is fasted and has no contraindications to ketamine sedation but the father is very anxious about the procedure and has a lot of questions that he wishes to ask prior to giving consent. He is particularly concerned because he knows that ketamine is a recreational drug and has seen some reports of it being dangerous in the media.

Candidate Instructions:

You have assessed a 4 year old boy in paediatric ED who has a laceration to the left thigh. He caught his leg on a nail whilst running in the park. The wound is neurovascularly intact distally and amenable to suture in ED under ketamine sedation. You have already attended to antibiotic and tetanus prophylaxis and the child is comfortable after some simple analgesia and IN fentanyl. He has normal observations.

You must gain informed consent for the procedure from the father of the child. Part of this must include a discussion of the options of intravenous versus intramuscular ketamine. The child currently doesn't have a cannula.

Please attempt to answer the father's questions

Actor Instructions: Father

You are Luke Smith, a 34 year old father of Benjamin. His mother is out of town and you not used to dealing with things like this on your own. He has a cut on his leg and the doctor wants to give him something to make him sleepy so they can stitch it up. You are really worried about this because when you had an anaesthetic for gallstones there was a problem and you woke up in ICU.

All you know about ketamine is that it was in the newspaper the other week because someone at a dance festival took it and they ended up on life support and nearly died.

Ben is a fit and healthy boy who is fully vaccinated and has never been in hospital before. He had a cold 2 weeks ago, which has resolved fully. He is on no meds and has no allergies.

You want to ask the following questions

- What is the worst side effect that might happen?
- Has anyone ever died during this kind of procedure?
- How long will it take?
- Does it hurt? Will he be totally asleep?
- Can he go home afterwards?
-

STATION 2: Paediatric Ketamine Sedation Consent

Candidate Name:

Examiner Name:

COMPONENT ASSESSMENT

Select one option for each component

	Performing poorly and nowhere near the level of a new FACEM	Performing significantly below the level of a new FACEM	Performing below the level expected of a new FACEM	Borderline at the level of a new FACEM	Performing well at the level of a new FACEM	Performing very well/above the level of new FACEM	Performing at an exceptional level way above that of a new FACEM
	Please rate ALL the following domains:						
Medical Expertise	☐	☐	☐	☐	☐	☐	☐
Prioritisation/Decision Making	☐	☐	☐	☐	☐	☐	☐
Communication	☐	☐	☐	☐	☐	☐	☐
Professionalism	☐	☐	☐	☐	☐	☐	☐
Teamwork/Collaboration	☐	☐	☐	☐	☐	☐	☐

DETAILED ASSESSMENT CRITERIA

Please use the following criteria to inform your ratings

Medical Expertise

- Explains the need for sedation – pain control, keep child still for ease and safety of procedure and amnesia for events
- Explains what ketamine is – analgesic and sedative
- Explains how ketamine is administered – IV or IM
- Explains differences between IV and IM – onset/offset, need for IV, risk of not having an IV, risk of vomiting greater with IM
- Checks for contraindications – allergy, active asthma/URTI, head injury, altered GCS, uncontrolled seizure disorder, porphyria, thyroid disease, heart disease, unfasted <3hrs
- Explains what to expect – drowsy/dissociated, nystagmus, random noises and movements, salivation, duration of full effect, emergency and recovery time
- Explains risk – Laryngospasm, apnoea, hypoxia, emergence phenomena, high BP and pulse, vomiting

Communication

- Introduces self and clarifies that actor is the father of the child
- Builds rapport, uses silence, doesn't interrupt
- Clarifies the fathers current understanding, and what he knows about sedation
- Invites questions and answers appropriately
- Doesn't use jargon
- Allows time to think
- Empathetic

Prioritisation/Decision Making

- Explains that will be appropriate to discharge patient after appropriate observation (2hrs post approx.) when is unaltered, ambulant, can eat and drink
- Ensures that parent has appropriate communication, transport, lives within easy reach of hospital in case of delayed complication

Teamwork/Collaboration

- Works together with parent to ensure that both parties happy to proceed with consent

EXAMINER NOTES

Candidate performance notes: Please provide candidate feedback including any areas of strength in their performance and suggestions for how they could improve.

OSCE 'incident reporting' notes: Please provide details if an issue occurs which may influence this candidate's exam outcome e.g. protocol breach, candidate illness etc.

STATION 3:

Cranial Nerve Examination- Bitemporal Hemianopia

Single Station: 3 Mins reading time, 7 minute examination

Participants

Examiner: Claire Mitchell

Patient: Laura Kater

Set Up

BIG Teaching Room (half screened off)

Patient sat on a trolley

Ophthalmoscope

Cotton Wool

Neuro-tip

Tendon Hammer

Tuning Forks

Scenario

45 year old woman with a bitemporal hemianopia due to pituitary tumour. No other neurological findings.

Candidate Instructions

Your task is to examine the cranial nerves of this 45 year old female patient who presents with a headache and visual disturbance. You are NOT permitted to ask any further history from the patient.

Actor/Patient Instructions

You have an isolated bi-temporal hemianopia when your visual fields are tested

Examiner Instructions

1 minute 30 secs from the end of the scenario you must stop the candidate and ask them the following questions

- What are the positive findings that you have discovered on examination of the patients cranial nerves? (Bitemporal Hemianopia)
- What are the likely causes of this finding? (Pituitary tumour/bleed/craniopharyngioma/meningioma/aneurism of Ant comm artery)
- How will you investigate this further? (CT/MRI/Pituitary and endocrine function tests)

- What will be the disposition of this patient if they have a pituitary space occupying lesion? (Urgent OP clinic follow up with neuro/neurosurgery, no need for acute admission)

STATION 3: CRANIAL NERVE EXAMINATION

Candidate Name:

Examiner Name:

COMPONENT ASSESSMENT

Select one option for each component

	WORST				MID				BEST
	Please rate ALL the following domains:								
Medical Expertise	☐	☐	☐	☐	☐	☐	☐	☐	☐
Communication	☐	☐	☐	☐	☐	☐	☐	☐	☐
Decision Making/ Prioritisation	☐	☐	☐	☐	☐	☐	☐	☐	☐

DETAILED ASSESSMENT CRITERIA

Please use the following criteria to inform your ratings

Medical Expertise

- Performs a detailed neurological exam that includes the following
 - Comments on need to test smell for full exam but notes not routinely performed
 - Visual Acuity
 - Visual Fields by confrontation
 - Pupil Reflexes
 - Fundoscopy
 - Ptosis
 - Eye movements including asking patient to report diplopia
 - Power/bulk of masseter and temporalis
 - Sensation in 3 zones of face
 - Jaw jerk and corneal reflexes (to be stopped if attempts corneal for actor comfort)
 - Facial movements
 - Asks about taste sensation
 - Rinnes and Webers
 - Uvula/Gag (stop if attempts)
 - Trapezius and SCM power
 - Tongue protrusion/wasting
- Correctly identifies bitemporal hemianopia
- Lists differential diagnoses
 - Pituitary Macroadenoma
 - Pituitary haemorrhage
 - External Compression of optic chiasm region – Craniopharyngioma/Meningioma
 - Anterior communicating artery aneurism
- Correctly identify the next appropriate test (CT/MRI/Tests of pituitary and end organ endocrine function)

Communication

- Introduces self and clarifies the patients name
- Explains the examination process to the patient

- Is patient and explains each step with clarity
- Uses simple, easy to understand language (lay person appropriate)

Prioritisation and Decision Making

- Identifies that patient should receive semi-urgent imaging to ensure no haemorrhagic cause
- Realises that in context of SOL there is not an urgent need for admission - can most likely be followed up in urgent clinic by neuro/neurosurg

EXAMINER NOTES

Candidate performance notes: Please provide candidate feedback including any areas of strength in their performance and suggestions for how they could improve.

OSCE 'incident reporting' notes: Please provide details if an issue occurs which may influence this candidate's exam outcome e.g. protocol breach, candidate illness etc.

GLOBAL RATING FOR STANDARD SETTING:

This scale is used in the standard setting process for the OSCE. We would like you to make a judgment that is independent of their scores on the adequacy of their performance. This element **MUST** be completed for the standard of the examination to be set.

Select the ONE BEST option that reflects your judgment of how well the trainee performed in this OSCE station:

Clear fail

☐

Marginal fail

☐

Borderline

☐

Marginal pass

☐

Clear pass

☐

(end of assessment)

Station 4: Disaster Management

Candidate Information

It is 4.10pm on a Monday, and you are the Consultant Team Leader at Royal Darwin Hospital. The NUM has received a call from the ambulance service to inform the department that there has been a mass casualty situation. You are the only major hospital within a 300km range of the accident.

The following methane report is relayed to you:

M – Major Incident Declared (vs on standby)
E - Exact Location – Coolalinga on Stuart Highway, approx. 30km south of Darwin
T – Road Train versus multiple vehicles
H – Hazards- no chemical spills /road now closed to all but emergency vehicles
A – Access to scene established, exit route clear
N – 15 casualties (10 serious (5 of which intubated – 3 adult/2 paed), 5 minor)
E – Emergency Services all on scene but limited capacity, careflight en route with assistance including helicopter.

You must discuss your disaster plan with the NUM, who will inform you of the current state of the department. (rough numbers of free/occupied beds and the acuity of patients in general – not detailed info on each patient)

You have the following staff (double staffing as between 2-6pm):

- Consultants x4 (plus 3 on clinical support in the offices)
- Registrars x8
- RMO's x5
- Interns x2

There will be whiteboard provided in the room.

NUM (Actor) Instructions

You are very concerned about the current state of the department, you have never been involved in a major incident like this before. You are anxious.

Resus is empty – there are 2 beds available

All 23 **majors** beds are occupied with patients, 2 are double bunked. 15 of them are admitted and there are only 3 free beds in the hospital

All 6 **paediatric** beds are occupied, but it is anticipated that all will be discharged after results review and observation.

Of 12 **EMU** beds, 5 are free. The remaining patients are all anticipated discharges within the next 12 hrs, none is considered in need of admission to hospital.

Fast Track has 15 patients registered to the area. 5 of which have been seen and are awaiting results but likely to be discharged. No admitted patients

There are 5 patients in the **main waiting room** but all are CAT 4 or 5

You are keen to know the following:

- How will the current patients be managed?
- How will the department be prepared and set up for the influx of disaster patients?
- What staff members will be required and where will we get them from?
- What extra equipment is required?

STATION 4: Disaster Planning

Candidate Name:

Examiner Name:

COMPONENT ASSESSMENT

Select one option for each component

	Performing poorly and nowhere near the level of a new FACEM	Performing significantly below the level of a new FACEM	Performing below the level expected of a new FACEM	Borderline at the level of a new FACEM	Performing well at the level of a new FACEM	Performing very well/above the level of a new FACEM	Performing at an exceptional level way above that of a new FACEM
	Please rate ALL the following domains:						
Medical Expertise	☐	☐	☐	☐	☐	☐	☐
Prioritisation/Decision Making	☐	☐	☐	☐	☐	☐	☐
Communication	☐	☐	☐	☐	☐	☐	☐
Teamwork/Collaboration	☐	☐	☐	☐	☐	☐	☐
Advocacy	☐	☐	☐	☐	☐	☐	☐
Professionalism	☐	☐	☐	☐	☐	☐	☐

DETAILED ASSESSMENT CRITERIA

Please use the following criteria to inform your ratings

Medical Expertise

- Notify Switchboard to activate Disaster Plan if not already happened
- Request for copy of Disaster Sub-Plan specific to emergency department
- All staff to remain on duty
- Use of action cards/delegation of roles
- Use of disaster triage system as per disaster plan – all arriving patients to be incorporated into disaster triage whether from the event or not
- Use of disaster specific documentation
- Current patients:
 - Assign senior staff members to discharge all non serious/non urgent patients including those in waiting room
 - Sets up area for those discharged to wait to be collected
 - Contact specialty teams to take over patients who are referred and awaiting assessment for admission – expedite transfer to wards/corridors on wards
 - Document all patients in department/those discharged to allow follow up when disaster stood down
- Set up of department
 - Not enough bays for intubated patients
 - Consider whether immediate transfer to ICU possible
 - Set up of alternative area as makeshift resus area
 - May need additional receiving areas e.g wards elsewhere in hospital, for less seriously injured patients
- Awareness of the need for additional supplies of equipment
 - E.g ventilators/infusion pumps
 - Set up fluid warmers/pre drawn up and labelled drugs

Prioritisation and Decision Making

- Calls external disaster and implements dept specific disaster plan
- Identifies that must discharge non urgent/non serious patients from ED – re-directed to local GP services/walk in clinics/represent at later stage
- Identifies need to move admitted and awaiting admission patients to the ward/ward corridors under the care of specialty teams
- Identifies that 5 intubated patients take priority on arrival and clears sufficient space to accommodate all with appropriate monitoring/ventilators/nursing staff

Communication

- Confirms the details with NUM and whether any additional information available
- Clear, calm and decisive when explaining to NUM
- Listens to NUM's responses without interrupting
- Asks NUM if they have any questions

Leadership and Management

- Consideration of current departmental state/staffing and shift changes/arriving patients/impact on the hospital as a whole
- Consideration of security and media management/lock down of department
- Escalates to hospital exec level to allow other departments to clear space/discharge patients from wards

Teamwork and Collaboration

- Works collaboratively with NUM during discussions, identifies that (s)he is lacking in specific disaster experience and leads through the process

EXAMINER NOTES

Candidate performance notes: Please provide candidate feedback including any areas of strength in their performance and suggestions for how they could improve.

OSCE 'incident reporting' notes: Please provide details if an issue occurs which may influence this candidate's exam outcome e.g. protocol breach, candidate illness etc.

Station 5: Colleague in Distress

Candidate Instructions

You are working on a busy Saturday afternoon in a tertiary ED. You notice that one of the registrars working that day appears upset and looks as though he may have been crying. He has made several inappropriate management decisions throughout the day, including accidentally giving tazocin to a penicillin allergic patient. He still has 4 hours of his shift left

He has been working in the ED for 4 months and was initially performing well but over the last month has been involved in several incidents where patient care has not been optimal due to poor decision-making. The nurses have also complained that he has been abrupt and rude to them at times.

You have just handed over to the afternoon team leader and have no clinical responsibilities at this time so decide to talk to him in the office.

You have asked the registrar, Dr Liam Swan, to join you in your office to discuss the shift so far. You are neither his supervisor or DMT but feel that it is appropriate to debrief with him regarding the clinical error.

Registrar Instructions (Actor)

You are distressed about a mistake that you made earlier in the shift, where you accidentally administered a penicillin based antibiotic (Tazocin) to a penicillin allergic patient. The patient developed a minor rash, but is well and has been admitted to the ward without consequence. The patient was angry and had a go at you in the middle of ED. You burst into tears and are very embarrassed by this.

You know that you have been short tempered and rude to the nurses due to feeling very depressed and stressed out. You feel very bad about this and aren't sure how to apologise.

There are bigger underlying issues that you **only disclose if specifically asked** if there is anything else going on in your life. These are:

- You are gay but your family, who are devout catholics, have no idea and they would not be supportive. You came out to your friends 6 months ago, they are all interstate. Some of your friends have become more distant. You feel very alone
- You are very homesick since moving to Darwin 4 months ago. Initially you were very positive about the move and were enjoying the work. However, you don't feel like you have made many friends and are living alone. You are isolated and spend all of your free time sitting on the sofa watching TV.

- You think you have depression and have recently started taking Venlafaxine, but you haven't seen a GP and just prescribed it for yourself. You are reluctant to see a GP as you don't want depression to be on your medical record. You have poor sleep/loss of appetite/anhedonia. You are not suicidal and haven't made any plans to harm yourself.

- You are also drinking too much alcohol. Most nights you have a bottle of red wine to help you sleep. You have never been intoxicated at work but are often very hungover. You are very worried about your alcohol intake as your father is an alcoholic. You are very ashamed.

Not using any illicit drugs

No medical illnesses

You feel you have no one to talk to

Don't want to speak to EAP – don't see the point, but will agree to see a local GP and also consider alcohol counselling, but not in the hospital as you don't want anyone to know

Don't want to take time off – work is a good distraction, but you can be talked into it if the candidate is empathetic and talks about a staged return to work

You are aware that your clinical work has suffered as a result of life events/stress/depression

STATION 5: Colleague in Distress

Candidate Name:

Examiner Name:

COMPONENT ASSESSMENT

Select one option for each component

	Performing poorly and nowhere near the level of a new FACEM	Performing significantly below the level of a new FACEM	Performing below the level expected of a new FACEM	Borderline at the level of a new FACEM	Performing well at the level of a new FACEM	Performing very well/above the level of a new FACEM	Performing at an exceptional level way above that of a new FACEM
Please rate ALL the following domains:							
Communication	☐	☐	☐	☐	☐	☐	☐
Professionalism	☐	☐	☐	☐	☐	☐	☐
Advocacy	☐	☐	☐	☐	☐	☐	☐
Collaboration/Teamwork	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐

DETAILED ASSESSMENT CRITERIA

Please use the following criteria to inform your ratings

Professionalism

- Professional appearance, demeanor and conduct
- Explains that will respect registrars confidentiality unless patients are at risk or grounds for reporting to AHPRA.
- Explains that there is need to inform the ED Director/Supervisor of clinical related concerns
- Empathic interaction with registrar
- Non judgemental
- Conveys concerns regarding registrars professionalism/clinical decision making
- Non judgmental approach

Communication

- Outlines the reasons for the inpromptu conversation
- Verbal clarity, conciseness, specificity
- Appropriate body language
- Allows registrar time to speak, doesn't interrupt and uses silence
- Invites questions/answers questions appropriately
- Agree with registrar on a mutually acceptable remediation and follow up plan
- Incorporates both performance management and trainee health and wellbeing perspective, must check that trainee happy with plan

Advocacy (for trainee)

- Provides support and offers suggests various options for follow up
- Explains that self prescribing is not a good idea and potentially harmful – advise against it
- Ensures that no immediate suicidal ideation
- Give the registrar the option of leaving the shift early, suggests this would be safer
- Sends registrar home, as likely not able to make appropriate decisions in current distressed state
- Confirms that the registrar can guarantee their safety/not actively suicidal
- Offers employee assistance program/mentor contact/referral to GP/alcohol counselling etc
- Ensures that the registrar has not been working whilst intoxicated

- Arranges to see the registrar again/or another consultant that has a mentoring/supervisory role in a timely fashion

EXAMINER NOTES

Candidate performance notes: Please provide candidate feedback including any areas of strength in their performance and suggestions for how they could improve.

OSCE 'incident reporting' notes: Please provide details if an issue occurs which may influence this candidate's exam outcome e.g. protocol breach, candidate illness etc.

Station 6: CVC Insertion

Candidate Information

You are required to insert an internal jugular vein CVC into an intubated patient who has sepsis and requires CVP monitoring and inotropes.

There will be a mannequin in the room and the trolley is set up but you need to check everything you need is present. There is a nurse to assist you that you must interact with – they can help you with anything that is missing from the equipment

Please perform the procedure exactly as you would in a real patient, with ultrasound guidance.

You may talk outloud as you proceed if you wish

The examiner will guide you if there are any steps that you can omit on the mannequin, otherwise proceed as you usually would.

Nurse (Actor) Information

You can help the candidate to fasten gown, open sterile equipment, pour cleaning solution, hand things to them, find additional items needed

Only the scalpel is missing from the set up (provided in room for you to provide only if asked)

There will be 3 cleaning solutions – chlorhex pink, yellow irrigation fluid and betadine. They must tell you which one they want to use – if they don't specify you must ask before pouring as the yellow solution is inappropriate

Examiner Information

The only step that the candidate cannot perform is the infiltration of local anaesthetic – once they have drawn up the LA please advise them not to infiltrate the mannequin

The scalpel is missing from the set up

At the end of the procedure you must ask the following questions:

- What post procedure steps can you take to confirm the line position
 - CXR/Transduce for venous waveform/VBG check
- Where on a CXR should the tip of the line sit
 - In the SVC beyond the bifurcation of confluence of the SCV and IJV, and not into the right heart

- What are the potential complications of an IJV CVC

- Early – Accidental arterial puncture, pneumothorax, cardiac arrhythmia, bleeding
- Late – Infection, migration, venous thromboembolism,

STATION 6: CVC Insertion Mannequin

Candidate Name:

Examiner Name:

COMPONENT ASSESSMENT

Select one option for each component

	Performing poorly and nowhere near the level of a new FACEM	Performing significantly below the level of a new FACEM	Performing below the level expected of a new FACEM	Borderline at the level of a new FACEM	Performing well at the level of a new FACEM	Performing very well/above the level of a new FACEM	Performing at an exceptional level way above that of a new FACEM
Medical Expertise	☐	☐	☐	☐	☐	☐	☐
Communication	☐	☐	☐	☐	☐	☐	☐

DETAILED ASSESSMENT CRITERIA

Please use the following criteria to inform your ratings

Medical Expertise

- Checks all equipment and notices that there is no scalpel on the trolley before the start of the procedure
- Positions trolley head down
- Aseptic technique – gloves, gown, drapes, mask, hair net, sterile probe cover/gel
- Identifies landmarks and uses ultrasound to identify vessels
- Chooses betadine or chlorhex/alcohol (pink) to clean skin, rather than irrigation fluid (yellow) which is inappropriate for the procedure
- Infiltrates local (stopped so as to preserve mannequin)
- Correct seldinger insertion technique – needle/wire/scalpel cut/dilator/line
- Correct depth of line approx 15cm
- All lines aspirated and flushed
- Correctly fixed in place with clips and sutured in at 2 points
- Dressing applied
- States will order a chest Xray to confirm position
- Answers all questions posed by the examiner appropriately

Communication

- Is polite and courteous to nurse assistant
- Gives clear and concise instructions to the nurse with regards actions during the procedure
- Thanks the nurse appropriately at the end of the procedure

EXAMINER NOTES

Candidate performance notes: Please provide candidate feedback including any areas of strength in their performance and suggestions for how they could improve.

OSCE 'incident reporting' notes: Please provide details if an issue occurs which may influence this candidate's exam outcome e.g. protocol breach, candidate illness etc.

Station 7: History Taking – Syncopal Episodes

Single Station: 3 mins reading time, 7 minutes history taking/explanation

Candidate Instructions

A 26 year old male presents to the emergency department with recurrent syncopal episodes. He now feels well. This is his ECG.

Take a focussed history, risk stratify him, and explain likely causes to this patient.

Actor Instructions

You are a 26 year old Malaysian Male who presents with 2 episodes of “passing out” over the last week.

Today – at the 24 hour gym after a late shift when suddenly started to feel dizzy and breathless for 30 seconds while on the treadmill. Palpitations for a few seconds then LOC/fall off treadmill. Was afterhours and no one around in gym– estimate only 30 secs unconscious.

Had only been running for 5 mins quite slowly, didn’t feel dehydrated and cant pin point any precipitants

Full recovery, no injuries

No tongue biting/muscle soreness/incontinence/post ictal phase

Exactly the same thing happened at home last week – assumed it was due to dehydration after a hard gym session so just ignored it – didn’t seek medical advice/no one was present

No infective sx/postural sx/chest pain/SOB (Answer “no” to all other symptoms enquired about)

No recent travel

First time has ever had an ECG

Never had nocturnal sx but has always slept alone

Normally fit and healthy

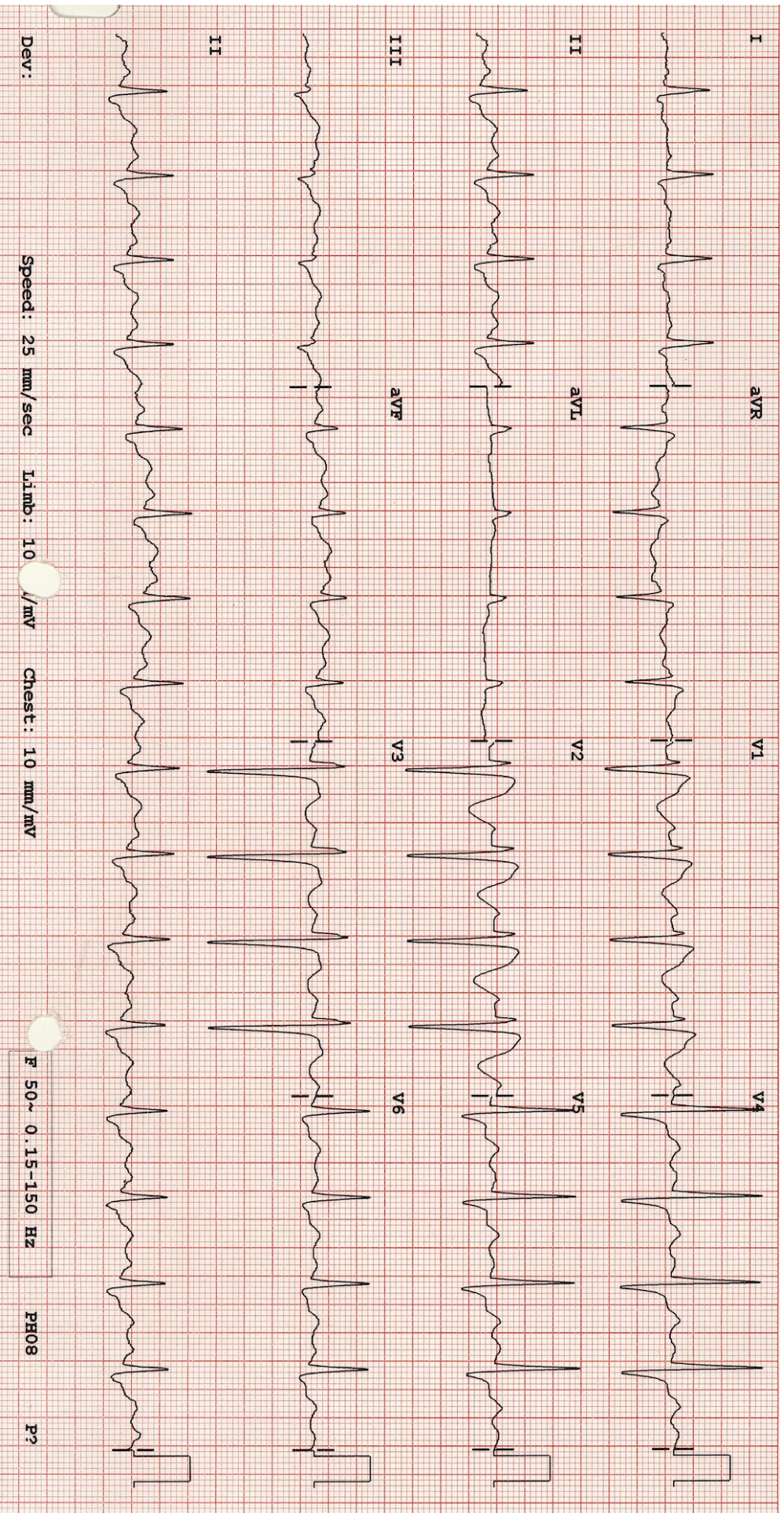
No medications, OTC drugs, recreational drugs

SH – computer programmer, single, drink alcohol 1x per week (4 units usually – you don’t have the enzymes to handle alcohol well!)

FH – Paternal uncle died suddenly when he was in 20’s, father has had a stroke

Examiner Instructions

If the candidate has not already explained the likely diagnosis (Brugada Syndrome) and that it is life threatening you must stop the candidate at 6 minutes to ask them for their most likely diagnosis and risk stratification



STATION 7: Syncope History Taking

Candidate Name:

Examiner Name:

COMPONENT ASSESSMENT

Select one option for each component

	Performing poorly and nowhere near the level of a new FACEM	Performing significantly below the level of a new FACEM	Performing below the level expected of a new FACEM	Borderline at the level of a new FACEM	Performing well at the level of a new FACEM	Performing very well/above the level of a new FACEM	Performing at an exceptional level way above that of a new FACEM
	Please rate ALL the following domains:						
Medical Expertise	☐	☐	☐	☐	☐	☐	☐
Prioritisation/Decision Making	☐	☐	☐	☐	☐	☐	☐
Communication	☐	☐	☐	☐	☐	☐	☐
Teamwork/Collaboration	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐

DETAILED ASSESSMENT CRITERIA

Please use the following criteria to inform your ratings

Medical Expertise

- Explores the peri event period
 - Identifies high risk precipitant – during exercise
 - Prodrome – palpns/dizziness and not vertigo
 - Recall of event itself - i.e lacking recall/LOC/duration
 - Establishes that no witnesses/bystander account
 - Post event phase – any injuries/tongue biting/incontinence/muscle aches
 - Identifies that full recovery with quick onset and offset
 - Identifies recurrent event
- Full and appropriate systems review including lack of chest pain/ishaemic sx/recent gastro illnesses/neurological sx/fevers
- Seeks Hx of sudden death in family
- Recognises that patient is at risk of Brugada Syndrome given SE Asia descent, FH of sudden death, age, male,
- Identifies that previously no PMH
- Identifies that no nocturnal sx detected before – e.g gasping respirations/apnoea
- Identifies no drug precipitants – specifically antiarrhythmic drugs
- Takes a social Hx – notes that patient lives alone, is IT worker and has no social habits that may have been implicated
- Correctly interprets the ECG as concerning for Brugada Syndrome (given clinical context)
- Gives reasonable differential
 - Likely Brugada but need to exclude others e.g ischaemia/hypoglycaemia/HOCM/dehydration and OH etc

Prioritisation/Decision Making

- Recognises seriousness of syncopal episodes as life threatening
- Explains the need to check electrolytes/other blood tests/ECGs/telemetry/holter/other tests led by cardiology
- Explains need to admission to a highly monitored area e.g CCU/HDU/Area with telemetry
- Explains potential need for defibrillator if diagnosis is confirmed, but that cardiology led decision

Communication

- Introduces self, builds rapport
- Uses open questions initially, working towards closed to clarify details
- Doesn't interrupt, allows time to answer
- Doesn't use jargon, explains in clear plain language that a lay person would understand
- Invites questions/discussion of concerns
- Checks understanding
- Uses the visual of the ECG to explain the patients presentation

EXAMINER NOTES

Candidate performance notes: Please provide candidate feedback including any areas of strength in their performance and suggestions for how they could improve.

OSCE 'incident reporting' notes: Please provide details if an issue occurs which may influence this candidate's exam outcome e.g. protocol breach, candidate illness etc.

Station 8: ABG/DKA Teach Intern

Candidate Instructions

You are the consultant in the Majors area of a busy metropolitan ED. An intern approaches you with a blood gas from a recently arrived 15 year old male patient – (See attached prop – there is a copy in the room also). The intern has taken a history/examined the patient and will give you a brief summary of the case, you may ask questions to clarify any facts that are unclear.

You tasks are as follows:

- Interpret and explain the blood gas to the intern in the context of the clinical presentation
- Explain in detail to the intern what the next steps in this patient's investigation and management will be
- Answer any questions that the intern may have

You are NOT to suggest the following

- Going immediately to the bedside to see the patient – there is no actor in this scenario

Intern (Actor) Instructions

You are a new intern and you have just seen Jonny Smith. You are worried because he is very lethargic and his blood gas doesn't look all that normal. You aren't that good at blood gases and are confused (again!)

The patient is 15 years old and has never been unwell before. Over the last 3 weeks he has been tired, had polyuria and polydipsia. Over the last 24 hrs he has had some vague abdominal pain without other symptoms (answer no to all other systems enquiry questions). He has been very lethargic and today he keeps falling asleep.

No PMH/meds/illicit drugs/smoking

Lives with parents

Goes to school/performs well

No sig FH

You have examined him:

P 120

BP 100/60

Sats 98%

RR 40

Temp 37.1

Looks dehydrated

CVS/RS/Abdo all NAD

GCS 14 – other neuro normal

He has very bad breath

VBG

pH	7.05
pCO ₂	23
pO ₂	40
HCO ₃	10
Lact	3.4
Gluc	65.5
Na	125
K	5.0
AG	22

INTERPRETATION

Metabolic Acidosis/HAGMA

Secondary to DKA

Consistent with presentation

Resp compensation appropriate .

Expected CO₂ = $(1.5 \times 10) + 8 (+/-2) = 23$

Delta Ratio = change in AG/change in Bic = $(22-10)/(24-12) - 12/12 = 1$

No additional acid base disturbance

Raised AG

Corrected Na = $125 + (65.5-5.5)/3 = 145$

NOT hypernatraemic

Potassium at upper range of normal –not yet requiring addition to the IVF

When drops to 4.5 and passed urine need to replace

If asked for your view on how to manage DKA, you must state *"I've never seen it before, do you just give them a lot of subcut insulin?"* You do not know anything more than that

Examiner Instructions

If the candidate suggests that they go and see the patient – tell them that the patient is on a commode currently and is not available to review directly

If the candidate gets to 5minutes 30secs and has not started to explain the required investigation and management they should be directed to do so.

OSCE Station 8

VGB

pH 7.05

pCO₂ 23

pO₂ 40

HCO₃ 10

Lact 3.4

Gluc 65.5

Na 125

K 5.0

AG 22

Metabolic Acidosis/HAGMA
Secondary to DKA
Consistent with presentation

Resp compensation appropriate .
Expected CO₂ = $(1.5 \times 10) + 8 (+/-2) = 23$

Delta Ratio = change in AG/change in Bic = $(22-10)/(24-12) - 12/12 = 1$
No additional acid base disturbance

Raised AG

Corrected Na = $125 + (65.5-5.5)/3 = 145$
NOT hypernatraemic

Potassium at upper range of normal –not yet requiring addition to the IVF
When drops to 4.5 and passed urine need to replace

STATION 2: VBG DKA Teaching

Candidate Name:

Examiner Name:

COMPONENT ASSESSMENT

Select one option for each component

	Performs poorly and nowhere near the level of a new FACEM	Performs significantly below the level of a new FACEM	Performs below the level expected of a new FACEM	Borderline at the level of a new FACEM	Performs well at the level of a new FACEM	Performs very well and above the level of new FACEM	Performs at an exceptional level way above that of a new FACEM
Medical Expertise	☐	☐	☐	☐	☐	☐	☐
Communication	☐	☐	☐	☐	☐	☐	☐
Professionalism	☐	☐	☐	☐	☐	☐	☐
Scholarship/Teaching	☐	☐	☐	☐	☐	☐	☐

DETAILED ASSESSMENT CRITERIA

Please use the following criteria to inform your ratings

Medical Expertise

- Correctly interprets the VBG as a HAGMA likely secondary to DKA In a new type 1 diabetic (required for minimum level PASS)
- Better marks if comments/explains that:
 - CO₂ compensation at expected level for degree of acidosis
 - Calculates and explains delta ratio of 1
 - Corrects the sodium for hyperglycaemia
 - Comments on high normal potassium and relevance to treatment (when <4.5 and PU)
- Advises need for resus bay, cardiac monitoring, 2x IV lines (1 for sampling)
- Correctly advises of urgent investigations required
 - FBC/EUC/LFT/CMP
 - Ketone finger stick
 - Ongoing monitoring of Gluc/electrolytes/ketones
 - Seek a cause –urine/consider CXR
 - Considers imaging of abdo if patients pain doesn't resolve – although states that can be due to DKA in itself and often resolves with treatment.
- Correctly advised of urgent management – can state that will use a local protocol but needs to outline general principles of DKA management
 - Fluids – statement that likely significant dehydration which need to calc, but must mention that cerebral oedema can be a problem especially in children
 - Insulin - IV appropriate, 0.05 – 0.1 unit/kg/hr. NaCl ok as not hyper/hyponatraemic when calc corrected Na
 - Correction of electrolytes – K added to bags at 20mmol/L when K level 4.5 and PU
 - DVT prophylaxis
 - Treatment of cause if discovered e.g abx for infective focus
- Mentions that patient will need high dependency care and involvement of an endocrinologist/paediatrician asap

Communication

- Introduces self and clarifies the interns name and rank
- Is patient, doesn't interrupt the intern during presentation of facts

- Clarifies the interns current understanding
- Ensures that the intern has understood the explanation and instructions
- Invites questions and answers appropriately
- Identifies that child and parent will need education and explanation

Scholarship and Teaching

- Listens intently to the interns presentation in a patient fashion
- Explores the interns medical knowledge and encourages collaborative approach to developing a management plan
- Recognises that the intern has substandard knowledge and suggests how they might improve e.g. looking up the DKA protocol

EXAMINER NOTES

Candidate performance notes: Please provide candidate feedback including any areas of strength in their performance and suggestions for how they could improve.

OSCE 'incident reporting' notes: Please provide details if an issue occurs which may influence this candidate's exam outcome e.g. protocol breach, candidate illness etc.

- Uses clear and concise language
- Directs questions at specific individuals using their names
- Examples of closed loop communication
- Uses a safe defibrillation script
- Refers using ISOBAR or similar to ICU consultant

Teamwork/Collaboration

- Allocated roles and tasks to all team members
- Listens to prompts and questions that the team may raise – is not dismissive or disregards the team members
- Ensures that the person performing CPR is not exhausted
- Asks the team whether they have any suggestions

EXAMINER NOTES

Candidate performance notes: Please provide candidate feedback including any areas of strength in their performance and suggestions for how they could improve.

OSCE 'incident reporting' notes: Please provide details if an issue occurs which may influence this candidate's exam outcome e.g. protocol breach, candidate illness etc.
