

OSCE 1

Candidate Instructions

This is a 7-minute **Simulation** station.

You are the ED consultant in charge who has just been called into a resus cubicle to help manage a 32-year-old woman, G4P3 at 38/40 gestation who has just delivered a baby in the ED. You are in a large metropolitan hospital with an obstetric service but the labour ward is in a separate building to the ED.

She presented to triage in labour and was transferred to a resus cubicle and delivered the baby soon after. The newborn baby appeared well and is being managed by another ED consultant and a paediatrician in another cubicle nearby.

You arrive within a couple of minutes of delivery. The patient is currently being managed by a junior ED registrar and two competent emergency nurses.

Your task is to:

- Lead your team in managing the care of this patient.
- Answer any questions the registrar asks you.

The registrar will provide all examination findings. The registrar and nurses are capable of performing any procedures which you direct them to perform (you are not expected to perform any interventions or procedures on the mannequin). Any information provided to you by the registrar or nursing staff will be accurate.

You will instruct / guide / assist the registrar in any interventions. You will not directly manage the patient (mannequin).

This OSCE will assess the following domains:

- Medical Expertise – 50%
- Prioritisation and Decision Making – 30%
- Teamwork and Collaboration – 20%

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Examiner Instructions

This is a 7 minute Simulation station.

This station tests a candidate's ability to effectively manage a patient in the third stage of labour, with particular regard to management of a major PPH. The candidate is expected to instruct the registrar as to their strategy for patient management and is not required to directly manage the patient.

At no stage will the bleeding be well-controlled although it will lessen slightly with intervention. There will still be a requirement for the patient to go to theatre urgently for definitive care.

This OSCE will assess the following domains:

- Medical Expertise – 50%
- Prioritisation and Decision Making – 30%
- Teamwork and Collaboration – 20%

The case:

32-year-old woman, G4P3, 38/40

The patient delivered the baby only three minutes prior to the candidate entering the room, and has PV bleeding.

The confederate registrar is unsure of how to manage the patient.

The patient has not been administered any medications.

Vital signs on candidate arrival are:

- Temp 37.2
- HR 130 bpm
- RR 16 /min (on ventilator)
- SaO2 99 % room air
- BP 130/80 mmHg

Props list

Role players – Registrar, Resus nurse/s

iSim

Mannequin + pelvis

Basin, placenta, mock blood-stained sheets

IV fluids and cannulas

IDC

Medication trolley

White board or butchers paper on wall

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Registrar Role-player Instructions

This is a 7 minute simulation station.

You are a junior ED registrar. Your primary role is to take direction from the candidate (team leader) in managing this patient (a mannequin) in the third stage of labour.

- Your role is important in moving the scenario in the correct direction in a timely manner
- You provide information to the candidate about examination findings
- You will be responsible for providing prompts/questions to the candidate about the patient - refer to prompts in the script.

However,

- You will **not** show initiative or suggest solutions/problems e.g. If the BP is low you will merely state:

"The BP is 75"

Try to avoid statements that tend to suggest that there is a problem needing fixing eg "The BP is still low at 75, should we do something about that?" or potential solutions "Would you like to give some fluid for that?"

This can be difficult as it is the opposite of good medical/nursing practice.

If the candidate doesn't explain the reasoning behind their decisions, ask for clarification

"Why are you doing that?" or "How does that help?"

Resus Nurse Role-player Instructions

You are an experienced ED nurse. You are ALS competent, able to draw up necessary drugs.

Only perform tasks if requested. Try not to anticipate.

You can attach monitoring / HFNP O2 / Fluids - monitoring + single IV access already attached.

You can report vital signs (Displayed on monitor) e.g. "The BP / HR is..." However, you will not show initiative or suggest solutions/problems e.g. If the BP is low, you will merely state "The BP is 70"

Try to avoid statements that tend to suggest that there is a problem needing fixing eg "The sats are still low at 75, should we do something about that" or potential solutions "Would you like me to help you bag?"

This can be difficult as it is the opposite of good medical/nursing practice.

If a candidate has mentioned a particular treatment/ management earlier in the scenario which has not actually been delivered it is appropriate to give a reminder e.g.

"What did you say earlier about the blood?"

When asked to perform a task – if a drug, confirm what dose and acknowledge when given.

If a task, acknowledge when performed.

All drug doses or infusion rates must be provided by the candidate. Clarify orders as required. Write down drugs or doses on the whiteboard where possible

When drawing up a drug it will take approximately 1 minute from the order to the delivery

If asked to do multiple things at the same time, state:

"I will not be able to do all of these at once, in what order do you want me to do them?"

Case details/Script

You are managing a 32-year-old woman who has just delivered a baby in the ED. You are in a large metropolitan hospital with an obstetric service but the labour ward is in a separate building to the ED.

She was 38 weeks pregnant, G4P3, and presented to triage in labour. Her previous deliveries were all uncomplicated NVD and she has had an uncomplicated antenatal course with this pregnancy. Contractions started only 2 hours ago and she was on her way to the labour ward when she got the urge to push so she stopped at the ED which was close by. She was transferred to a resus cubicle and delivered the baby within a few minutes. The delivery of the baby was uncomplicated, the baby had good initial Apgars and is being managed by another senior ED consultant and paediatric registrar in another cubicle.

Nil other PMHx. No meds. NKA.

Vital signs on candidate arrival are:

- Temp 37.2
- HR 130 bpm
- RR 16 /min
- SaO2 99 % room air
- BP 130/80 mmHg

As the candidate comes into the room, state:

“Thanks for coming in – can you help me with this patient? She’s just delivered.”

Expected actions:

- Rapid establishment of the team and themselves as team leader
- Confirm vital signs
- Rapid assessment of situation – PHx, gestation, confirm singleton, duration labour

Within 1 minute - **“She seems to be bleeding a fair bit”**

Expected actions:

- Initial management of 3rd stage labour:
 - Check for twin
 - Deliver placenta – **“How do I do that?”**
 - Syntocinon
 - IV access, bloods
 - Stimulate uterine contraction – rub fundus
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If the candidate does not mention the placenta, the confederate should say:

“What should we do about the placenta?”

- **“The bleeding isn’t stopping”**

- **Vitals – HR 140 BP 80/50 Sats 98%RA**

Expected - stepwise management of PPH including seeking a cause:

- Patient on monitor (being done as enters room)
- 2 x large bore IV access (1 being placed as enters room) – *expect 2nd to be requested as well as large bore*
- Bloods sent (FBC, VBG, U+E, Coags +/- ROTEM)
- Blood Xmatched
- IVF/blood transfusion
- Major transfusion pack/protocol - Packed cells, FFP, platelets, cryoprecipitate, fibrinogen concentrate,
- Help called for (***Obs in theatre but will be down to ED in 10 mins***)
- Placenta check (***looks intact***)
- Stimulate uterine contraction – rub fundus
- Medications – oxytocin IM, oxytocin infusion, (possible) ergometrine, (possible) ondansetron, (carboprost), analgesics prn (***ask doses/route if not given***), TXA
- PV exam for trauma +/- intervention (***there is no PV trauma; no uterine inversion***)
- Focussed history for contributing factors and causes of PPH – ***to be provided by reg G4P3, prev NVDs uncomplicated, this pregnancy uncomplicated with regular antenatal care at this hospital, in labour for 2 hours. PMHx nil. Meds: folate/Fe. Allergies NKDA.***

“The bleeding isn’t stopping”

BP 70/40 HR 150

- Immediate bimanual compression uterus
- Once bimanual compression performed, oxytocin IM and infusion started and trauma excluded then PV loss reduces but continues

She’s still bleeding but it seems to be slowing a bit.

HR 110 BP 80

- IDC – to improve compression
- Expedite theatre – ring theatre, anaesthetics, confirm obstetric consultant (not just reg) is on way.

Do not accept Bakri balloon – in theatre only

Ideally candidates will explain their rationale for management choices, otherwise the registrar should ask

“Can you explain why we do that?”

If the candidate does not stimulate uterus and give oxytocin, BP will continue to drop:

“The bleeding is heavier.” BP 60/40

With correct management the BP will improve to 80 and the bleeding will lessen but it is never well-controlled. There will still be a requirement for the patient to go to theatre urgently.

Domain: Medical Expertise

- Recognises and addresses time-critical haemodynamic instability.
 - Awareness that this is an obstetric emergency
 - Calls for help
 - Recognition haemodynamic instability and potential for deterioration
 - Monitoring applied
 - Large bore IV access x2
 - Appropriate Ix – FBC, U+E, coags +/- ROTEM, Xmatch, VBG for urgent Hb
 - IV fluids
 - Major Transfusion pack/protocol - packed cells, FFP, platelets, cryoprecipitate, fibrinogen concentrate (good candidate mentions aims for temp, acid/base, ionized calcium, Hb, platelets, coags, fibrinogen)
 - Oxygen
 - Keep patient warm
 - Fast
- Focussed and relevant history and examination for contributing factors and causes of PPH.
 - Ensure not a multiple pregnancy – on history; may need exam/ultrasound
 - Seek and understand risk factors for PPH – in this case – age, multiparity, precipitous birth
 - Consider 4xTs - tone, trauma, tissue and thrombotic disorders – understands likely uterine atony (multiparity), possible genital trauma (precipitous labour), possible retained tissue (high parity)
 - Seek and treat cause(s) PPH
 - Vaginal exam - lacerations, episiotomy, uterine inversion – treat accordingly
- Specific treatment for PPH including procedures and medications
 - Delivery placenta – gentle traction
 - Stimulate uterine contraction – rub fundus
 - Seek and suture vaginal lacerations/episiotomy, and check for uterine inversion
 - Correct coagulation defects – FFP, cryoprecipitate, fibrinogen concentrate, platelets
 - Check placenta for completeness. ?retained POC
 - Syntocinon (oxytocin) 10 IU IM OR Syntometrine 1ml IM (for high PPH risk – can be repeated) – only after check for twin

- Consider ondansetron if giving Ergometrine
- Uterine atony - Oxytocin 10IU in 500ml CSL at 125ml/hr – can be increased to 250ml/hr
- Tranexamic Acid 1g IV; can be followed by infusion
- IDC where possible as improves bimanual compression
- Bimanual uterine compression
- Expedite theatre
- Bakri balloon – not accepted (requires GA)
- Carboprost 250 microgram IM – unlikely to be available in ED urgently
- Candidate mentions main contraindications to drugs given (ergometrine – HT, preeclampsia; carboprost – asthma, severe renal/cardiac/hepatic disease)

Domain: Teamwork and Collaboration

- Assumes clear leadership role of resuscitation team.
- Communicates clearly – directed to team members and encourages closed loop communication.
- Actively listens and gives summaries of current situation as scenario evolves.
- Monitors team members performance and completion of tasks
- Answers team members questions
- Maintains calm
- Communicates future plan/needs, to allow preparation

Domain/Subdomain 3: Prioritisation and Decision-Making

- Provides a logical escalating medical management plan
- Highlights treatment options and their priorities
- Provides a rationale for decisions re ongoing treatment and disposition
 - Briefly explains diagnostic reasoning and differential diagnosis in order to ensure team understanding
 - Can justify priorities if questioned

- Maintains a vigilance for other problems whilst instituting treatment

OSCE 1 – Sim PPH

Examiner Marking Sheet

CANDIDATE:

COMPONENT ASSESSMENT

For each Domain below, select the **ONE** option that best represents the candidate's level of performance. The option **"Minimum level of competency displayed"** represents the level of safe independent practice **as a junior FACEM** in Australasia.

Very poor level of competency displayed	Well below minimum level of competency displayed	Below minimum level of competency displayed	Minimum level of competency displayed	Above minimum level of competency displayed	High level of competency displayed	Very high level of competency displayed
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Please rate **ALL** the following domains:

	Very poor level of competency displayed	Well below minimum level of competency displayed	Below minimum level of competency displayed	Minimum level of competency displayed	Above minimum level of competency displayed	High level of competency displayed	Very high level of competency displayed
Medical Expertise	☐	☐	☐	☐	☐	☐	☐
Prioritisation and Decision Making	☐	☐	☐	☐	☐	☐	☐
Teamwork and Collaboration	☐	☐	☐	☐	☐	☐	☐

Feedback:

Areas of strength:

Areas for improvement:

GLOBAL RATING FOR STANDARD SETTING:

This scale is used in the standard setting process for the OSCE. Please rate the candidate's **OVERALL** performance in this OSCE. The rating should take into account the entirety of the OSCE, rather than just a sum or average of the individual domain scores. This element **MUST** be completed for the standard of the examination to be set.

	Well Below Standard	Below Standard	At Standard	Above Standard	Well Above Standard
In terms of a safely practicing junior emergency physician , select the ONE option that best reflects the candidate's performance in this station:	☐	☐	☐	☐	☐