DAS Interprofessional Simulation Scenario – Plan D

Scenario: Cannot Intubate, Cannot Oxygenate (CICO) in an unanticipated difficult airway

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Learners: Anaesthetists – all grades, Airway Assistants and any other staff normally present at induction. This scenario is designed so that all members of the airway team, regardless of profession, can practice the anaesthteic non-technical (ANTS) and communication skills required during unexpected airway difficulty, following the DAS 2025 algorithm.

Intended Learning Outcomes (ILO's):

By the end of the session the learners should be able to:

1. Rapidly synthesise and **clarify airway situation** on arrival to an airway emergency, including key information about prior attempts at oxygenation without interrupting critical ongoing tasks.
   (ANTS domains: Situation Awareness; Teamwork)

2. Apply **clear leadership** and active followership by confirming the current plan, allocating roles, and explicitly preventing unnecessary further attempts or regression in the algorithm.
   (ANTS domains: Teamwork; Task Management)

3. Commit decisively to emergency front-of-neck airway (eFONA) when CICO criteria are met, using unambiguous verbal **declaration of CICO**.
   (ANTS domains: Decision-Making; Teamwork)

4. Support the **execution of eFONA** through effective role allocation, anticipatory task management, and clear communication within the team
   (ANTS domains: Task Management; Teamwork)

Faculty: Experienced in immersive simulation for learning and airway management. Embedded faculty member to guide scenario; role could be changed based on composition of learners. Authentic interprofessional learning will benefit from a multidisciplinary faculty.

Recommended timing: 10 min scenario + 30 min debrief

Background & Setup

Background to Scenario (for faculty):
This scenario is designed so learners join an evolving crisis and must rapidly orientate, lead, and coordinate team actions. The case is an unanticipated difficult airway in an ASA 2 patient undergoing *elective diagnostic laparoscopy**. In this scenario the embedded faculty have started induction and failed to intubate. They are on their 3rd attempt at laryngoscopy with a VL, having attempted and failed at face mask ventilation (with no adjuncts) in between attempts.
The patient will deteriorate, and they will need to proceed to eFONA. The scenario will be guided to emphasise the importance of clarifying what has happened so far with the team and where they currently are in the DAS algorithm, before coordinating the team to progress to plan D.

Specific Setup:

- Intubatable manikin
- Trolley/patient bed
- Anaesthetic machine including suction
- Pre and peroxygenation equipment including nasal cannula and high-flow nasal oxygen (HFNO) if available
- Videolaryngoscope (VL) with Macintosh and hyperangulated blades
- Airway equipment (ETT, syringe, bougie, stylet, facemask, OPA (Guedel), 2nd generation supraglottic airway (SAD), anglepiece, catheter mount)
- eFONA kit (size 10 scalpel, size 6.0 ETT, coudé tip bougie)
- eFONA neck task trainer (can be placed onto patient by planted faculty during scenario)
- Labelled syringes (induction agent, opioid, muscle relaxant, emergency drugs)
- IV cannula and IV fluids
- Sharps Bin
- Copy of DAS 2025 Guidelines for Unanticipated Difficult Airway

Required Roles / Participants:

- Anaesthetist and Assistant as embedded faculty
- Anaesthetist and Anaesthetic Assistant (+/- other theatre team members if available) as learners arriving to buzzer

Briefing for Learners:

Brief to Leaners:
It's 12:45pm and you have just finished your morning list. You are in the corridor and respond to an emergency buzzer in an elective theatre which a junior anaesthestist is in.

Anaesthetic Assessment:

- 56-year-old female undergoing an elective Diagnostic Laparoscopy
- BMI 30
- ASA2: Hypertension
- Airway: MP3, good mouth opening and neck extension, jaw slide A
- No previous GA's

Drug history: NKDA. Ramipril 1.25mg

Guidance to Faculty

Guidance for Anaesthetist (embedded faculty):
You are a junior anaesthetist attempting your third attempt at VL for an elective case for a diagnostic laparoscopy. Your attempts at ventilation between attempts (2-handed BVM only). Saturations have been maintained but now starting to slowly fall. You have called the emergency bell and are stressed. You want the arriving help to take over leading this situation. Provide clarity of the situation when asked, and help support the team and keep the scenario on track as things progress

Guidance for Anaesthetic Assistant role (embedded faculty):

You are available to support the learner in whichever way they request and perform clinical tasks if specifically instructed to do so. As the scenario progresses, you should monitor attempts and inform the learner of any clinical findings (e.g. desaturation) as they arise. Be prepared to prompt and prepare for next steps.

Scenario Progression & Actions

ILO	Scenario State and team actions	Transition Trigger (actions that will give you the material for the debrief)	Prompts if needed	Additional notes/debrief notes
1: Clarify airway situation	Emergency alarm - post induction. **HR 100 BP 140/90 SpO2 94% No ETCO2** Anaesthetist (faculty) on 3rd attempt. *"This is my third attempt and I've not been able to ventilate"*	Clarification of situation and what has been attempted so far.	From either embedded faculty: *"We've tried facemask ventilation, but not with a guedel"* *"Where are we on the algorithm?"*	This part of the scenario should highlight the challenges of arriving to help in a critical situation, and balancing ongoing technical task performance with the need to clarify the situation, and allow discussion of both content and timing of information exchange under these conditions. Use of role of the algorithm 'call-out checklist' and priming for eFONA including decision about what eFONA technique would be used.
2: Clear leadership	**HR 110 BP 140/90 SpO2 88% No ETCO2** Team will work through plans A-C with no ventilation possible and Sats continuing to fall slowly to **approx Spo2 70%.**	Allocation of tasks to different team members / followership from team to undertake tasks in the algorithm	**From faculty:** *"Can you lead this situation?"* *"Shall we work through A-D?"* **If learner wanting >1 further attempt at intubation:** *"I think we should declare this as a failed intubation"* *"Should we start getting the eFONA kit out just in case?" What eFONA technique would we use?"* **If not moving to Plan B:** *"I don't think we've tried an iGel yet, shall I do this while you set up for eFONA?"*	Embedded faculty to help guide this scenario through A-C in a timely manner. Focus on how team supports the progression through the algorithm, and maintains situation awareness. Clarification of roles and explicit leadership confirmation

3: Declaration of CICO	**HR 110 BP 140/90 SpO2 70->60% No ETCO2** Sats dropping slowly No ventilation possible by any technique.	Declaration of CICO and need to do an eFONA	*"I don't think anything is working and Sats are still dropping"* *"Do you think we need to move to front of neck?"*	Focus on the challenges and benefits of an explicit confirmation and precise standardised language to use.
4: Emergency front-of-neck airway	**HR 120 BP 90/60 SpO2 60% No ETCO2** Sats continuing to fall, HR climbing to 120 before dropping to 50 (hypoxic bradycardia). This can be altered depending on learner experience.	Team support individual performing eFONA with positioning, opening of scalpel and maintenance of anaesthesia including full neuromuscular blockade and oxygenation to upper airway	*"Can we help to position them?"* Quietly to a participant: *"Should we get any extra help? Are there any ENT surgeons on site?"*	Guide the team to support the individual and assistant performing eFONA. Can discuss what the rest of the team can be doing/thinking about without disturbing this critical procedure – including the use of 'call-out checklists'/eFONA algorithm
End scenario	ETCO2 confirmed after eFONA, Sats and HR improve with ventilation and maintenance of anaesthesia. **HR 100 BP 100/65 SpO2 95% ETCO2 5.8**	Team confirmthat procedure has been successful with waveform capnography.	*"We've got ETCO2. Sats are improving"*	Thank participants and end scenario there.

Debrief (faculty to use preferred debriefing tool)

Suggested questions for "analysis" section of debrief:

ILO1: Clarify Airway Situation

- *On arrival, what information did you prioritise gathering first?*
- *What helped you understand the current airway situation without stopping essential actions?*
- *What are the challenges of getting the team on the same on the page when the buzzer is pulled in a situation like this?*

ILO2: Clear and effective leadership

- *How was leadership established or recognised in this scenario?*
- *What does good leadership and followership look like in these situations?*
- *What can we do in situations like this when it is not clear who is leading?*
- *How do we as a team manage the "one more go" behaviour (Plan continuation bias) that sometimes happen in situations like this? (Use a graded authority assertiveness tool, e.g. CUSS or PACE, to help the anaesthetist's decision making)*
- *How comfortable do people feel about speaking up if they recognise that a critical step (eg attempt at SAD) has been forgotten?*

ILO3: Declaration of CICO

- *What told you that the situation had crossed the threshold into CICO?*
- *How was the declaration of CICO made clear to everyone in the room?*
- *What difference did explicit verbal commitment make to team behaviour?*
- *Who can make this declaration in this scenario?*
- What factors can potentially cause a delay in the declaration of CICO? Could introduce the terms 'Optimisation Bias' and 'Confirmation Bias' that can cause a delay in the decision to declare eFONA.

ILO4: Supporting eFONA

- *How did the team organise itself once CICO was declared and eFONA commenced?*
- *What helped ensure the proceduralist was supported rather than overloaded?*
- *How were parallel tasks (such as maintaining anaesthesia or thinking about the next steps) managed and prioritised?*

Further resources / Feedback

- DAS 2025 guidelines
- AirSim Facilitators User Guide
- AirClips demo videos – can consider for priming or consolidation of learning
- Human Factors Appendix, DAS 2025
- QR code for facilitator and user feedback

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