DAS 2025 Interprofessional Simulation Scenario – Plan C

Scenario: Unanticipated Difficult Tracheal Intubation (Plan C)

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 anaesthetic 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 learner should be able to:

1. Demonstrate coordinated team transitioning through the algorithm by clearly **declaring failed intubation**, ensuring shared understanding of urgency whilst keeping calm.
   (*ANTS domains: Situation Awareness; Teamwork & Communication*)
2. Demonstrate timely escalation and resource mobilisation including calling for help early, **preparing for eFONA**, and distributing tasks to anticipate deterioration and avoid fixation.
   (*ANTS domains: Task Management; Decision-Making*)
3. Establish a structured **"stop, think and communicate" moment** once oxygenation achieved with Plan C, consolidating information about oxygenation, patient status and surgical context to consider safe next steps.
   (*ANTS domains: Decision-Making; Balancing risk*)
4. Deliver clear, structured information exchange when help arrives using a **concise handover** and closed-loop communication to ensure safe continuation of care and alignment of the team during an airway emergency.

(*ANTS domains: Communication; Leadership/Followership*)

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 an unanticipated difficult airway in an ASA 2 patient undergoing *elective laparoscopic cholecystectomy**. Learners are asked to induce anaesthesia and manage the airway. They will encounter failed intubation (max 3+1 attempts) and unsuccessful ventilation with a SAD. They will be able to achieve facemask ventilation (Plan C), after which they will make the decision to wake the patient up.

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, NPA, OPA (Guedel), 2nd generation supraglottic airway (SAD), anglepiece, catheter mount)
- eFONA kit (size 10 scalpel, size 6.0 ETT, coudé tip bougie)
- Labelled syringes (induction agent, opioid, muscle relaxant, emergency drugs)
- IV cannula and IV fluids
- Copy of DAS 2025 Guidelines for Unanticipated Difficult Airway

Required Roles / Participants:

- Anaesthetist(s) – i.e. junior and senior (learners or embedded faculty)
- Anaesthetic Assistant (learner or embedded faculty)
- Clinical Support Worker (learner or embedded faculty)

Briefing for Learners:

Brief to Learners:

You are the anaesthetist on an elective general surgical list *(+/- with distant supervision – this can be adjusted depending on the grade of the learner).* The next patient on your list is a 67-year-old man for an elective hemicolectomy*. He has been pre-assessed by your colleague and is appropriately fasted. He is in the anaesthetic room and standard monitoring is applied, checklists have been completed, the surgeon is scrubbing, and we are ready to begin induction. All that is now required is a confirmation of the airway management strategy and start pre-oxygenation.

Anaesthetic Assessment:

- BMI 31
- ASA2: T2DM
- Airway: MP2, good mouth opening and neck extension, jaw slide A.
- Previous uneventful GA aged 9; tonsillectomy.

Drug history: NKDA, Metformin 500mg BD

Guidance to Embedded Faculty

You are available to support the learners to achieve the ILOs, keep the scenario on track and overcome any difficulties with simulation artefact. As the scenario progresses, you should time and monitor attempts and inform the learner of any clinical findings (e.g. desaturation) as they arise. There are some example prompts in the template below

Scenario Progression & Actions

ILO	Scenario State and team actions	Transition Trigger (actions that will give you the material for the ILO)	Faculty Prompts (if needed)	Additional notes/debrief points
1: Declaration of failed intubation	Patient Induced **SpO_2 100%, HR 80bpm, BP 124/88, ETCO2 2.8** Can't intubate; 3+1 intubation attempts Difficult FMV - only possible with 2 hands + guedel	Declaration of unable to intubate, can ventilate (with difficulty) - sharing of level of urgency amongst the team. Declaration for transition to Plan B and request eFONA kit is made available (priming).	***If no attempts at optimisation*** *"Is there anything we can do to get a better view?"* *"Do you need help with oxygenation?"* **If not moving on to plan B:** start dropping sats and *"When do we move to plan B?"*	Aim to uncover strategies that keep the team on the same page that this is a critical situation but maintain calm. Also how the team can keep awareness of elapsed time and transition to plan B. Failure of Plan A can be declared at any time, even after the first attempt at tracheal intubation. Appropriate help must be summoned.
2: Plan B and prime for eFONA	**SpO_2 100%, HR 80bpm, BP 124/88, ETCO2 2.0** Team can try SAD x3 max. Obs slowly deteriorate: sats drop and no ETCO2 **SpO_2 82%, HR 80bpm, BP 124/88, ETCO2 0**	Team to get out eFONA kit while moving to Plan B. Team aware of sats dropping and now unable to ventilate. Help summoned (if not already) Declaration of failed Plan B and transition to Plan C whilst requesting eFONA kit to be opened.	***If no attempts to optimise:*** *"Should we try a different SAD?"* ***If eFONA kit not requested:*** Quietly to a member of the team: *"shall we get the FONA kit out, just in case?"* ***If help not requested:*** *"Should we hit the buzzer, or get anyone else?"*	Focus is on how team supports the transitioning through the algorithm, and monitoring of situation Discuss the role of the assistant in prompting transition and other assistance/recommendations Understanding that can move to Plan C at any stage. Plan C being the FINAL attempt at oxygenation, and is likely to be increasingly difficult.

3: Plan C: stop, think and communicate	**SpO_2 82%, HR 100bpm, BP 100/60, ETCO2 0** Sats further dropping to **SpO_2 70%** until attempts face mask ventilation (FMV) FMV possible with 2 hands and guedel**, ETCO2 6.9,** Sats improve rapidly to **SpO_2 96%**	Clarification amongst team that we now **can** ventilate and oxygenate Team aware of steps to optimise final attempt of oxygenation i.e. positioning, full NMB. Ensure 2-person technique at FMV has been displayed Discussion and consideration of options once stability achieved.	**If team haven't attempted FMV optimisation:** '*Should we optimise position?'* *'Should we give more muscle relaxant?'* *'Should we try a 2-person technique'* **If team don't notice improvement:** "Have we got ETCO2 now? Are the sats getting better?"	Use embedded faculty to guide team to Plan C while everything is set up for eFONA. Stop and think moment is an opportunity to look at how team gather information, make a decision and set tasks and roles for the plan to wake up. Acknowledge wake up is a complex scenario with risk of further deterioration or complications. Recognise the cognitive overload during unexpected failure (e.g. lost concept of time, drugs worn off or insufficient dose given)
4: Concise handover	**SpO_2 96%, HR 90bpm, BP 124/88 mmHg, ETCO2 5.0** Experienced anaesthetist (faculty or learner) arrives	Handover of situation, with inclusion of desaturation and listing of attempts made and what failed.	*"So what have we tried already?"* *"Sounds like waking the patient up is the best option – how shall we do this safely"*	Aim to guide team towards the use of standardised language in these situations, ensuring the learner understands the risk of both further attempts at this stage and the risk of further complications on emergence.
End scenario	Obs as above	Team start to prepare to wake patient up safely.	"Shall I get the sugammadex?"	Thank participants and end scenario there.

Debrief (faculty to use preferred debriefing tool)

Suggested questions for "analysis" section of debrief:

ILO1: Declaring difficulty

- *How did we keep everyone on the same page that this was a critical situation, but also keep the calm in the room?*
- *How can we encourage the team to move on to plan B and not get stuck on plan A?*

ILO2: Projection to getting FONA out

- *How comfortable do people feel about getting the FONA kit out when we're still on plan B?*
- *Do people feel that the anaesthetist would have to ask for it, or that the team could do this without being asked?*
- *What if the anaesthetist persisted in multiple attempts? How would you address this? (Use of graded authority assertiveness tool i.e. CUSS or PACE)*

ILO3: Stop and think moment

- *How do we make it clear to the team that the situation has changed and we are no longer moving through the algorithm and doing eFONA?*
- *What were you thinking about doing next once the sats had picked up and you had ETCO2 in plan C?*
- *Despite discontinuation of anaesthesia being recommended as the default option, it is not without risk. What are these risks and how can they be mitigated? (i.e. Situational awareness and vigilance for risks such as laryngospasm.How to prepare for this safely – assistance/drugs/equipment required)*

ILO4: Concise handover

- *When help arrived, how did you get them on the same page rapidly, without distracting from tasks?*
- *What do you think are the key bits of information to get across when expert help arrives?*
- *What are the mechanisms of getting help in these situations, and how could they be improved?*

Further resources / Feedback

- DAS 2025 guidelines
- Facilitators User Guide
- Human Factors Appendix, DAS 2025
- QR code for facilitator and learner feedback

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