

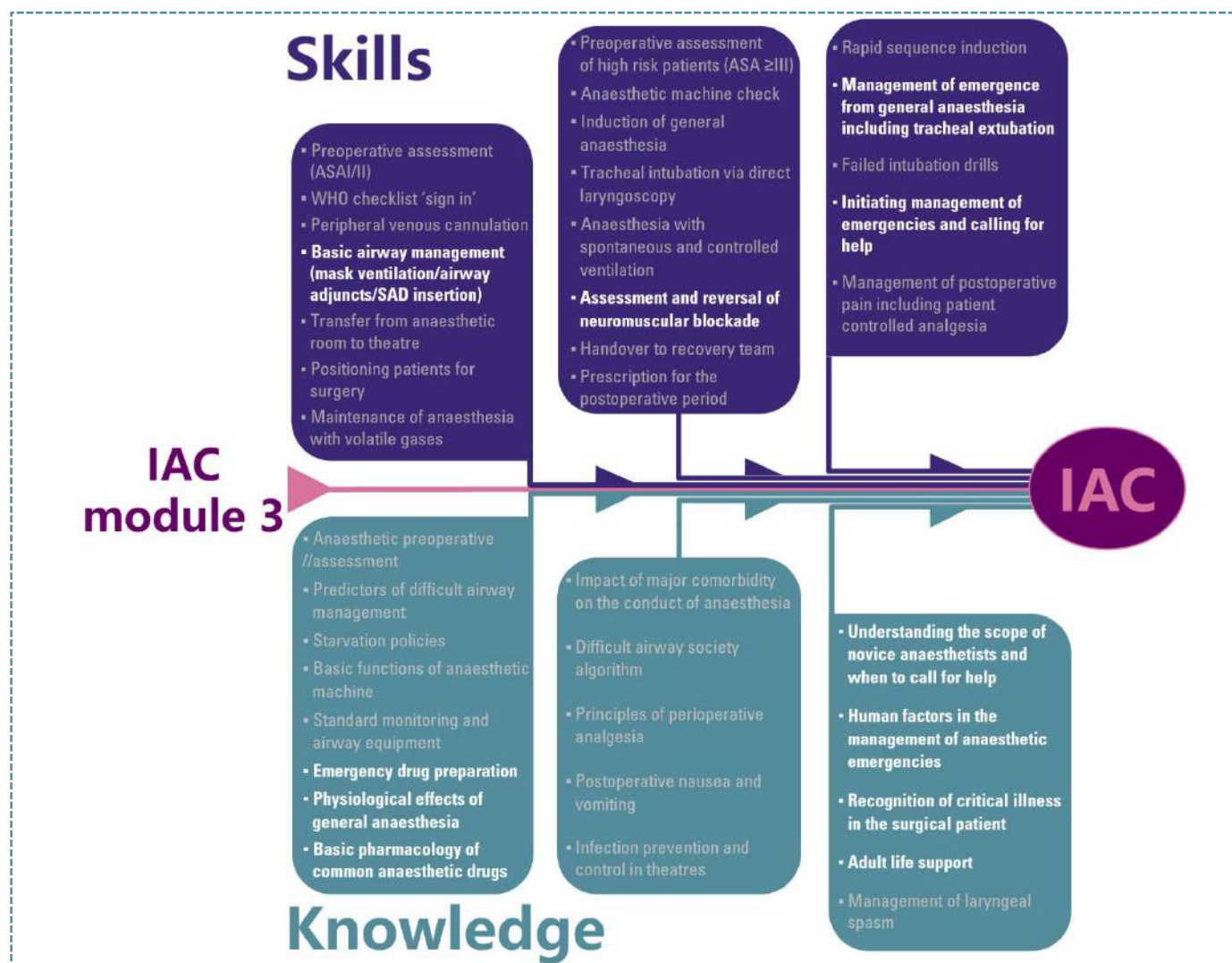
Learning outcomes

By the end of IAC Module 3 the learner will:

- Have a working knowledge of the emergency drugs they would have ready for use
- Experience decision making under pressure
- Know how to access the AAGBI Quick Reference Handbook and apply the guidance to a common anaesthetic 'emergency'
- Consider where to access sources of support within their own work setting
- Understand the importance of using a peripheral nerve stimulator when using neuromuscular blocking drugs
- Have discussed how they would manage extubation in a low risk patient using the DAS extubation guidelines

Trainer information

During the module learners will be developing skills and knowledge mapped to the RCoA IAC curriculum (see figure below).



Please note: IAC Modules 1 and 2 provided background knowledge and platform familiarity which is desirable, but not essential to learners before undertaking IAC Module 3.

IAC Module 3 follows takes up our virtual elective upper GI list that the learner has developed during the preoperative assessment module, IAC Module 1 and the preparation and induction module, IAC Module 2. We re-join at point of knife-to-skin for an ASA I patient undergoing a laparoscopic cholecystectomy.

The case is complicated by a profound bradycardia on insufflation of the abdomen. As the narrative progresses the learner makes a number of management decisions that can resolve the situation. Without timely intervention the 'emergency' will continue to deteriorate until senior 'help' arrives. In this scenario the learner is offered the opportunity to 'rewind' and have another opportunity to manage the case.

This is followed by a discussion on emergency drugs, where a summary is made available and the learner is signposted to the AAGBI Quick Reference Handbook.

The narrative develops with planning the patients extubation incorporating the DAS extubation guidelines with focus on performing an awake extubation on a low risk patient.

Finally the extubation is performed without incident.

Trainer information - discussion

Discussion of the case should develop naturally according to the individual's learning needs in a similar fashion to a CbD in a clinical setting. The learner should be encouraged to develop their own professional judgment according to required curriculum competence areas. The learner should be aware of these as they are stated at the start and on completion of each Module.

Other points for discussion could include:

- Common anaesthetic emergencies
- Assessment and monitoring of neuromuscular blockade
- The DAS extubation algorithms
- What are human factors?
- Where are sources of support in this organisation?

Appendix 1: IAC Module 3 transcripts

“Ok, so we’ve finished the case so lets get this tube out.”

“Ready to take that off.” Turns off volatile

“Turn that to 100% oxygen.” Turns O₂ to 100%

“Brilliant. Right then, so, we’ve positioned her appropriately.” Patient is semi recumbent on theatre trolley

“Lets see if we need to give any reversal. Lets check the train of four.” Patient’s hand jerks four times

“We’ve got a little bit of fade there. So lets just give our reversal. OK.” Gives reversal agent into canula on back of patients hand

“Excellent we’ll check that in a minute.”

“Switch this onto manual.” Leans over and switches from ventilator to manual ventilation on anaesthetic machine

“And see what we get.” Close up ventilator screen showing small tidal volume breaths

“Ok then, little bit of breathing, excellent, sure that will improve once the reversal gets going.”

“OK, everything looks ok, we’ve got a bite block in just so we’ve got some extra protection.”

“Are we going to loosen this?” Unties tube tie bow at side of patients mouth

“OK lets see what her breathing is like, so that’s excellent we just need to wait for the gas to go down and then she should be waking up very soon.”

“Lets check the train of four again.” Patient’s hand jerks four times, more vigorously than before

“Ok we’ll just take this off.” Removes peripheral nerve stimulator from right ulnar nerve

“Perfect.”

Louder voice to patient: **“Hello, you’re just waking up, operations all over, you’re just waking up, take some nice slow deep breaths for me, you’re doing really well now.”**

Monitor close up showing larger tidal volumes

"Little bit of suction." *Superficial suction side of mouth*

Louder voice to patient: ***"Ok open your eyes, operations all over, that's it, take some slow deep breaths for me."***

To ODP: ***"Just apply a little bit of PEEP, and we will cuff down please...excellent."***

Louder voice to patient: ***"You're just waking up, take some nice slow deep breaths, stick your tongue out for me."*** *Removed ETT in smooth motion.*

Louder voice to patient: ***"Well done, well done."***

To ODP: ***"Just pop the oxygen mask on, perfect."***

Louder voice to patient: ***"There we are, take some slow deep breaths, you're doing really well, got some good breathing, excellent."*** *Mask falls off circuit and is replaced. "You're doing really well.""*

To ODP: ***"We'll pop and oxygen mask on and then she's fine to go to recovery. Could someone ring them please and let them know that we're coming? Thank you."***