Clinical Practice Procedures: Airway management/ Video laryngoscopy and intubation – GlideScope® G02

Policy code	CPP_AM_DLV_0525
Date	May, 2025
Purpose	To ensure a consistent procedural approach to video laryngoscopy and intubation – GlideScope® G02
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless stated otherwise.
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Author	Clinical Quality & Patient Safety Unit, QAS
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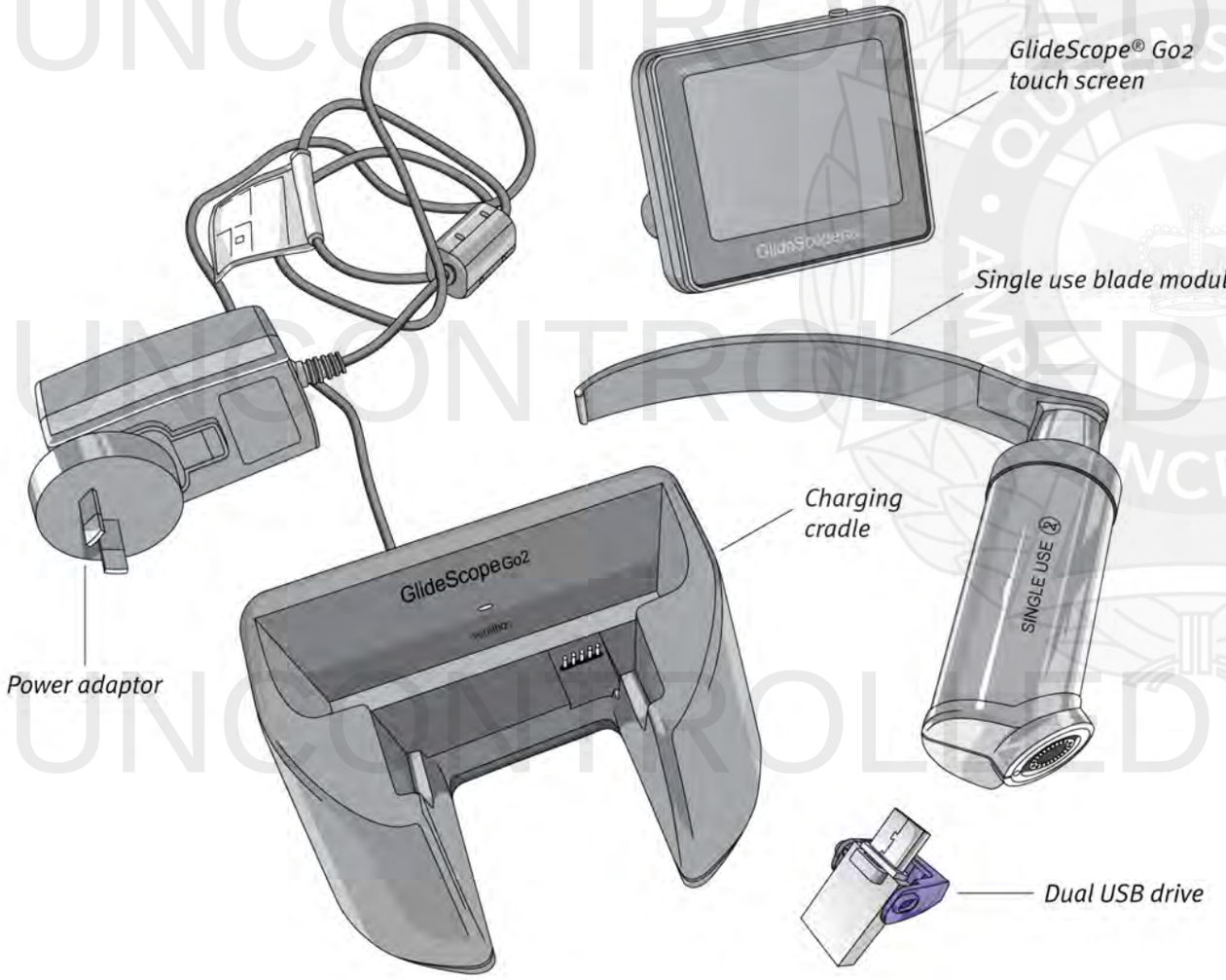
Video laryngoscopy and intubation – GlideScope® Go2

May, 2025

The GlideScope® Go2 is a handheld video laryngoscope that enables both direct and indirect airway views to facilitate rapid intubation.[1] It is designed for rugged conditions, making it ideal for use in the pre-hospital setting for both routine and difficult airways.

While video laryngoscopy (VL) was previously considered a rescue procedure for failed airways, VL is now the gold standard in advanced airway management. This reflects current best practice and aligns with contemporary evidence supporting improved first-pass success rates, enhanced glottic visualisation and increased patient safety.

The use of VL should be favoured over direct laryngoscopy unless exceptional circumstances exist. VL can be bypassed or delayed if there is equipment failure or if VL equipment is unavailable.



Indications

- Visualisation of the glottis for the purpose of:
  - oral endotracheal tube insertion
  - removal of foreign body

Contraindications

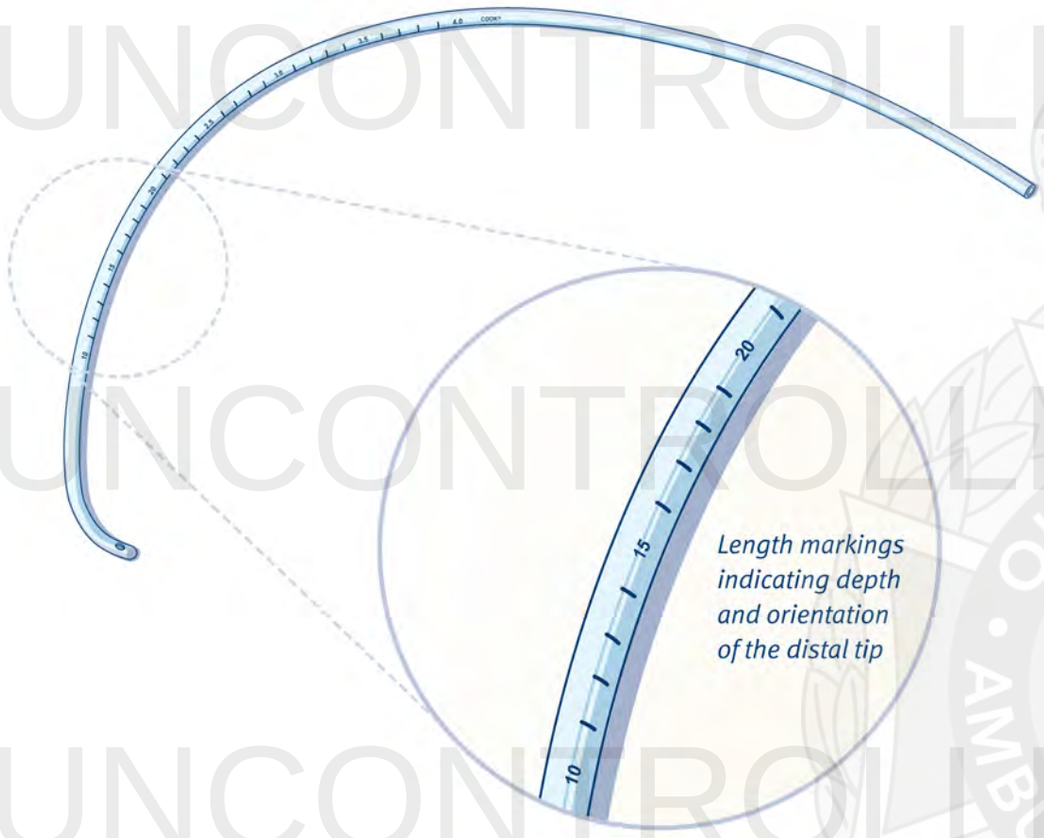
- Suspected or known epiglottitis

Complications

- Laryngospasm
- Hypoxia due to delays in oxygenation while performing the procedures
- Trauma to the mouth or upper airway, particularly teeth/dentures
- Exacerbation of underlying c-spine injuries
- Vomiting/regurgitation
- Patients not suitable for the supplied laryngoscopy blades

The **Frova Intubating Catheter (FIC)** is a 70 cm pre-curved 14 Fr (4.6 mm) airway introducer with a 30° angled distal tip designed to assist with oral endrotracheal tube placement.[6–9] It is recommended for routine or difficult intubations when using an ETT with an internal diameter (ID) of 6 mm or greater.

Curved FIC ready for use



The FIC's narrow diameter and angled tip enables targeted anatomical placement, maximising the accuracy of tracheal placement.

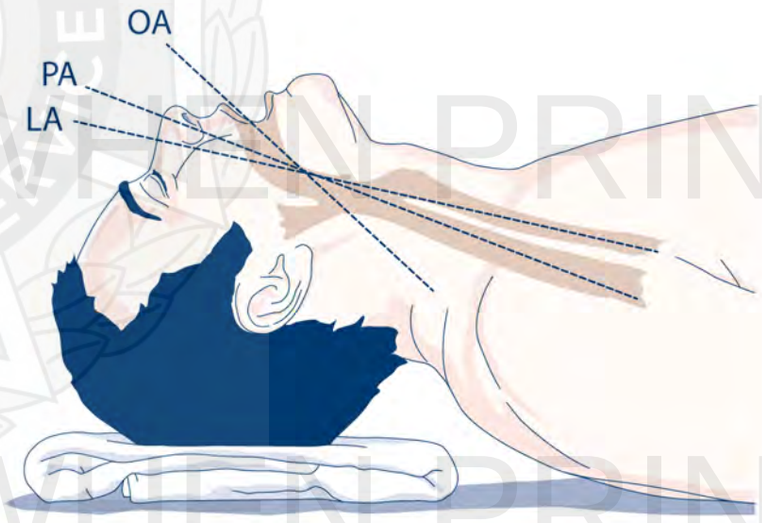
Care must be exercised to prevent trauma or perforation of airway structures during insertion.

Length markings are displayed on the internal curvature of the FIC indicating the depth and orientation of the distal tip.

Although traditionally designed to assist with Cormack-Lehane grade III and IV views, bougie use is mandatory for all adult patient intubations by QAS paramedics.

Procedure (Adult – Macintosh blades)

1. Power up the GlideScope® Go2 by pressing the power button on the top edge of the monitor
2. Remove the appropriately sized single patient use GlideScope® Go2 blade from the package, align the connection marking on the blade with the corresponding alignment mark on the monitor port and insert the blade fully into the port.
3. Confirm that a video image is being received from the laryngoscope.
4. To take video or snapshots during the procedure, tap anywhere on the Home screen and when the additional icons appear:
   a. Tap the **Record** (icon) button to take video or
   b. Press the **Snapshot** (icon) button to take a photo of the live display.
5. Position yourself for optimal visualisation of the larynx.
6. Place the patient's head in the appropriate position to align the oral, pharyngeal and laryngeal axes (neutral position, with MILS if c-spine injury is suspected).
   a. *Infant* – slight elevation of the shoulders
   b. *Small child* – slight extension of the head
   c. *Older child/adult* – extension of the head (elevation of the head may also be required)



LEGEND: oral axis (OA), pharyngeal axis (PA), laryngeal axis (LA)

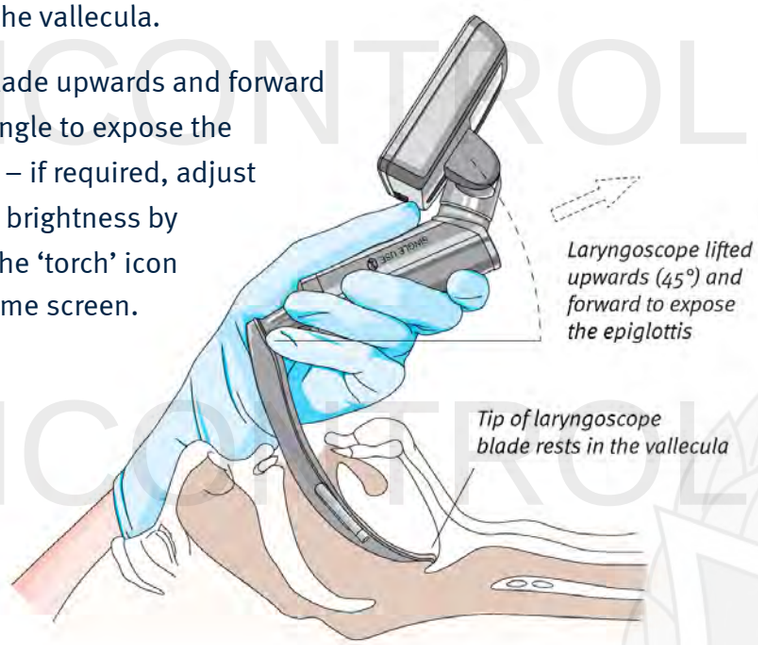
7. Open the patient's mouth and inspect the oral cavity.
8. Remove any dentures or removeable plates as required.

9. Grip the GlideScope Go2's laryngoscope handle with the left hand in a position to ensure optimal control and mechanical advantage.

10. Place the laryngoscope blade into the right side of the patient's mouth, gently sweep the tongue to the left and position the blade midline.

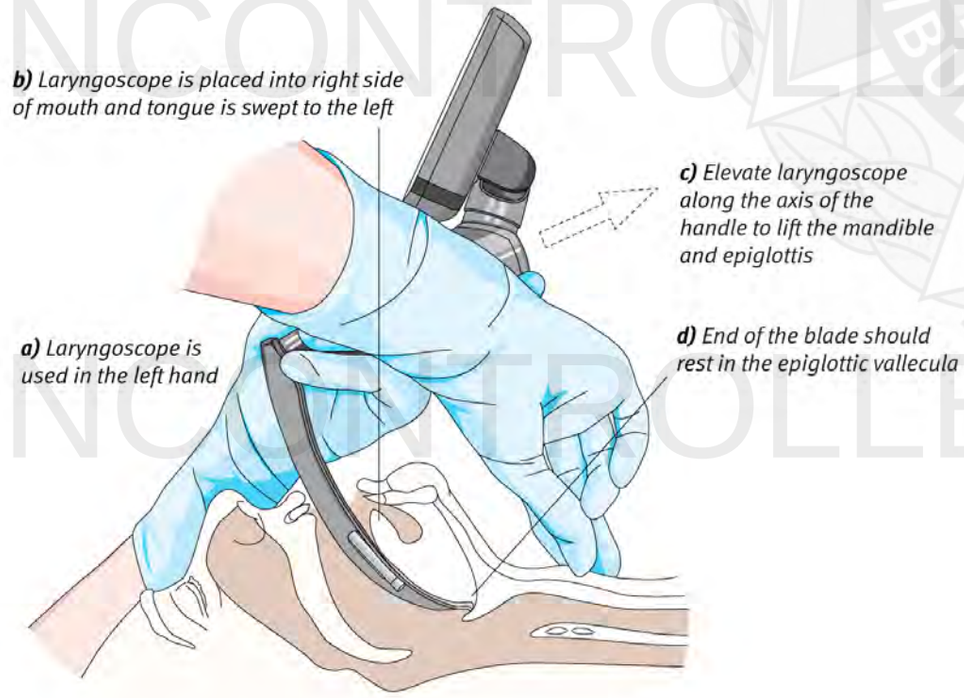
11. While viewing the screen, move the laryngoscope blade progressively down the tongue identifying relevant anatomy and gently place the tip of the laryngoscope blade in the vallecula.

12. Lift the blade upwards and forward at a 45° angle to expose the epiglottis – if required, adjust the blade brightness by toggling the 'torch' icon on the home screen.



13. Suction as required.

14. Consider laryngeal manipulation to optimise visualisation of the larynx.



15. Gently extend the curve of the FIC to optimise controlled directional placement.

16. With the right hand grasp the FIC with a 'pen like' grip while maintaining laryngoscopy.

17. While looking in the mouth, gently insert the upturned distal tip of the FIC alongside the right hand side of the blade.

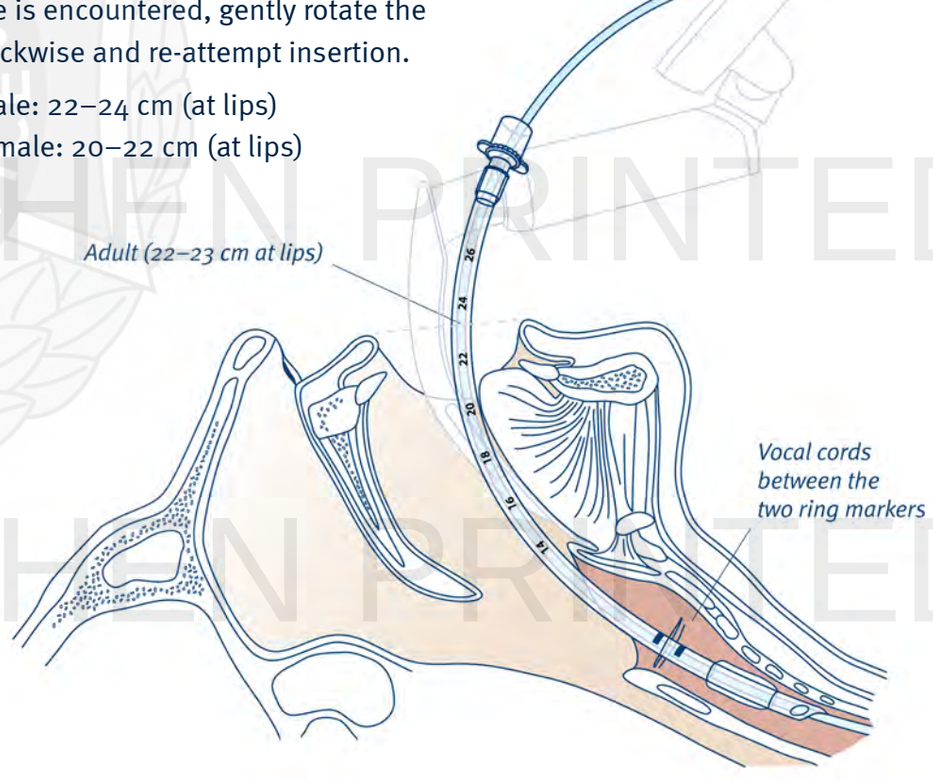
18. Visualise the screen and gently advance the FIC into the trachea. If resistance is felt, do not force advancement but rather gently rotate the FIC anti-clockwise before reattempting advancement.

19. The 'clicking' of the tracheal rings or 'hold up' when the FIC contacts the carina may be identified and is an indicator or correct tracheal placement.

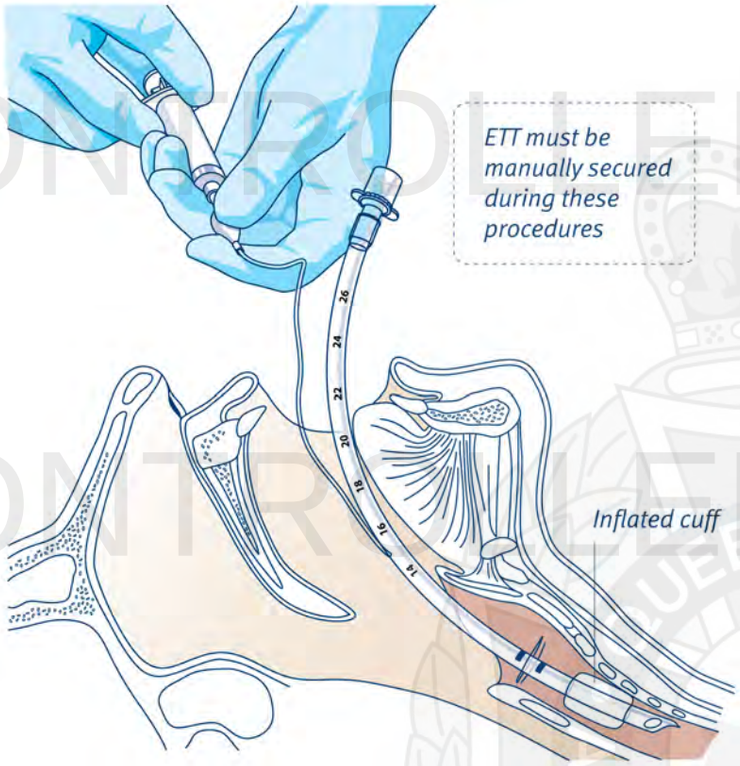
20. While maintaining visualisation of the larynx on the screen, request the airway assistant to place an ETT of the appropriate size over the intubating catheter.
    - Adult male: 8.0/9.0 mm
    - Adult female: 7.0/8.0 mm

21. Consider retraction of the corner of the patient's mouth to optimise unobstructed passage of the ETT.

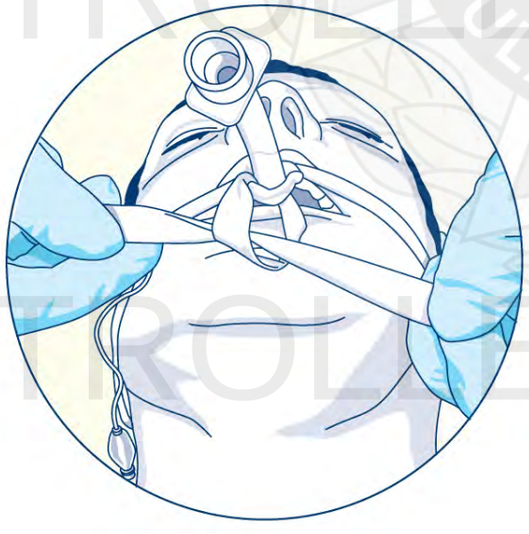
22. Gently insert the ETT's flexible distal tip through the vocal cords to position the vocal cords between two (2) ring markers. If resistance is encountered, gently rotate the ETT anti-clockwise and re-attempt insertion.
    - Adult male: 22–24 cm (at lips)
    - Adult female: 20–22 cm (at lips)



23. With the right hand, hold the ETT firmly at the lips until correct placement (appropriate EtCO2 waveform) is confirmed and the ETT is properly secured.
24. Remove the intubating catheter.
25. Remove the laryngoscope blade from the mouth.
26. Using a syringe, inflate the ETT cuff with the minimum amount of air required to provide an effect seal.



27. Remove the syringe from the ETT to effect the closing of one-way valve. Confirm the pilot balloon remains inflated.
28. Connect a resuscitation bag and commence ventilation.
29. Confirm correct tracheal placement by observing an appropriate continuous EtCO2 waveform (a minimum of 6 ventilations of moderate tidal volume is required for confirmation) and equal air entry.
30. Secure the ETT with a cloth tie.



31. Consider insertion of a bite block.
32. Administer post intubation sedation as required (titrated aliquots of morphine/fentanyl and/or midazolam).
33. Assess and adjust the ETT cuff pressure as required.

Additional information

- Airways should be graded according to the Cormack-Lehane classification. The grade is allocated according to the best airway view achieved during laryngoscopy.

Cormack-Lehane Classification	
Grade I	Complete glottis visible
Grade II	Anterior glottis not seen
Grade III	Epiglottis seen, but not glottis
Grade IV	Epiglottis not seen

- Under no circumstances is an ETT to be cut to reduce its length.
- Airway management in the pre-hospital setting presents a unique set of challenges for clinicians.[10–15] It is important to have a defined procedure that can be reproduced each time intubation is employed, to maximise the chance of a successful first attempt.
- ETT insertion is typically performed on scene, either in the field or in the ambulance. The airway team should always consist of an airway clinician and airway assistant. In trauma, a separate person to stabilise the c-spine (by manual in-line stabilisation) may also be warranted.
- The clinician performing the intubation takes control of the patient's airway during the preparation phase. The airway assistant stands behind and to the right of the operator doing the intubating, and passes the intubating equipment.
- It is important to ensure that all equipment is laid out within easy reach of the airway assistant, prior to intubation being attempted. In the ambulance, this is best achieved by laying equipment out on the bench beside the left cabin compartment door. In the field, the equipment should rest to the right of the patient's head. Suction should be available, with the Yankeur or DuCanto Catheter® located under the right shoulder of the patient.

Additional information *(cont.)*

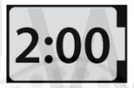
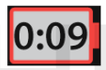
- If, on patient assessment, the airway appears particularly difficult, or there are patient factors that suggest the intubation will be very high risk (e.g., significant haemodynamic instability, hypoxia), the most experienced clinician should perform the intubation. In such circumstances, consideration may be given to delaying intubation until arrival at the hospital.
- If there is an absence of $EtCO_2$ sensing or inappropriate $EtCO_2$ waveform or quantative measurement, the ETT must be removed and the failed airway algorithm must be commenced.
- If intubation is unable to be achieved within 30 seconds OR two (2) attempts, the failed airway algorithm must be commenced.
- The QAS supplies GlideScope® Go2 laryngoscope blades in Macintosh 3 (MAC S3) and Macintosh 4 (MAC S4) sizes.

The QAS supplies ETTs in the following sizes:

Patient size/age	Recommended ETT size	Brand	Recommended intubating catheter/stylet size
Appropriate pre-term neonates	2.5	smiths medical (cuffless)	6 Fr intubating stylet
≥ 3 kg to < 8 months	3.0	MICROCUFF*	6 Fr intubating stylet
8 months to < 2 years	3.5	MICROCUFF*	6 Fr intubating stylet
2 to < 4 years	4.0	MICROCUFF*	6 Fr intubating stylet
4 to < 6 years	4.5	MICROCUFF*	10 Fr intubating stylet
6 to < 8 years	5.0	MICROCUFF*	10 Fr intubating stylet
8 to < 10 years	5.5	MICROCUFF*	10 Fr intubating stylet
Large child	6.0	Parker Flex-Tip®	Frova 14 Fr intubating catheter
Adult female	7.0	Parker Flex-Tip®	Frova 14 Fr intubating catheter
Adult female / male	8.0	Parker Flex-Tip®	Frova 14 Fr intubating catheter
Adult male	9.0	Parker Flex-Tip®	Frova 14 Fr intubating catheter

Buttons, icons and connections

BUTTON	FUNCTION
	**Power:** This is a physical button located on the top of the monitor.
	**Snapshot:** Takes a photo of the video feed. While the photo is being saved, the icon changes to the following icon:  Saving snapshot. Icon returns to standard Snapshot icon when complete.
	**Record (toggle):** Records the video feed. While recording, and depending on the recording status and mode, the record buttons icon changes to one of the following:  Waiting for system. This can take up to 5 seconds.  Video is recording. Tap to end recording.  A recording error has occurred.
	**Dynamic Light Control (DLC):** Toggles the DLC feature. Only displays when the attached blade supports DLC.  **DLC Off:** Dynamic Light Control is turned off.  **DLC On:** Dynamic Light Control is turned on.  **DLC Error:** An error occurred while setting the Dynamic Light Control.
	**More:** Contains the Settings menu icon and DLC icon.
	**Settings:** Opens the Settings menu.

BUTTON	FUNCTION
	**Battery Status:** Indicated the remaining battery power and the estimated time remaining.  **Red battery:** Less than 10 mins of battery life remaining  **Gold battery:** 11–25 mins of battery life remaining  **Grey battery:** More than 26 mins of battery life remaining
	**Back:** Return to the previous screen.
	**Forward:** Moves to the next screen or setting.
	**Cancel:** Closes the current window or message, cancelling any setting change that was in progress.
	**Save or Confirm:** Saves and closes the current setting or acknowledges and closes a message.
	Toggle (on): Indicates the associated setting is turned on.
	Toggle (off): Indicates the associated setting is turned off.
	Display text: Shows secure text while typing.
	Hide text: Hides secure text while typing.

Home Screen

FEATURE	FUNCTION
Video feed	Displays the video feed from the attached camera.
More	Contains the Settings button and, when available, the Dynamic Light Control button.
Battery level indicator	Displays the battery level and estimated time remaining.
Device information	Displays the device name, date, and time overlay. This information is included on snapshots and video recordings.
Record video	Start and stop video recording.
Snapshot	Takes a photograph of the video feed.

Charging the battery

The GlideScope® Go2 monitor internal lithium battery lasts for approximately 100 minutes of operation from a fully charged state.

The battery can be charged using the supplied charging cradle (recommended), or directly through the monitor's USB-C port using a Verathon approved power adapter. The battery should be charged until the indicator LED on the GlideScope® monitor is solid green. The monitor cannot be operated while charging.

Note: Using an unapproved power adapter may not charge the battery correctly. Pease use the power adapter supplied with the GlideScope® Go2

An estimated operating time remaining is shown on the monitor's battery icon on the screen. As the battery becomes depleted, the battery status bar will shrink and change colour.

Recording and storage of images

There is no formal requirement for QAS clinicians to routinely take videos or snapshots at any point of the procedure while using a video laryngoscope.

However, there may be specific circumstances where clinicians may be required to make and save recordings for purposes such as meeting the requirements for training or clinical review of airway procedures by CCP interns, or for regularly conducted HARU case reviews.

In all cases where airway images are taken, any images that may identify individuals in any way must be treated sensitively and with confidentiality as required by QAS privacy policy.

Exporting media files

1. Connect the dual USB-C drive to the GlideScope® Go2's USB-C port.
2. Power up the GlideScope® Go2 by pressing the power button on the top edge of the monitor and tap anywhere on the home screen.
3. When the additional icons appear, tap the **More** button, and then tap the **Settings** button.
4. In the **Settings** menu, tap **Media**, and then tap **Export**.
5. Set the options as needed for *Media*, *Date Range*, *After Export*, and *Encryption*, and then tap **Export**.
6. On the export confirmation screen, press **Yes**.
7. Connect the drive to an authorised QAS work computer to view the files.
8. Connect the drive to a computer to view the files.