The Difficult Airway Alert form has been developed with the intention of being a concise and effective communication tool regarding a difficult airway event, in order to reduce the risk of future airway morbidity in at risk patients.

The need to balance level of detail with simplicity must be recognised. This form does not take the place of a detailed pre-anaesthetic airway assessment.

This support document is intended to complement the form and clarify potential areas of confusion.

**Definitions**

**Difficult airway**

The term “Difficult Airway” refers to the presence of any clinically significant threat to oxygenation and/or ventilation with difficulty in any of the key domains of airway management. That is, difficult or impossible bag-mask ventilation, supraglottic airway insertion, tracheal intubation or front of neck access.

**Bag mask ventilation (BMV) – adapted from Han’s mask ventilation grading scale**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>Ventilation achieved by mask, with or without oral airway or other adjunct</td>
</tr>
<tr>
<td>Difficult</td>
<td>Mask ventilation inadequate, unstable or requiring two practitioners</td>
</tr>
<tr>
<td>Impossible</td>
<td>Unable to ventilate with mask</td>
</tr>
</tbody>
</table>

**Supraglottic airway (SGA) ventilation**

Consider describing difficulty with placing the device(s) as well as adequacy of ventilation.

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>Placement of and adequate ventilation via SGA possible with first or second selected device</td>
</tr>
<tr>
<td>Difficult</td>
<td>SGA ventilation clinically inadequate or unstable despite use of two or more different devices</td>
</tr>
<tr>
<td>Impossible</td>
<td>Unable to place or ventilate via SGA device</td>
</tr>
</tbody>
</table>

*Clinically adequate ventilation: greater than 7ml. kg⁻¹ with leak pressure no greater than 20cm H₂O²

**Tracheal intubation**

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>Direct intubation achieved easily</td>
</tr>
<tr>
<td>Difficult</td>
<td>Intubation required multiple attempts or additional equipment (e.g. bougie, specialty blades)</td>
</tr>
<tr>
<td>Impossible</td>
<td>Intubation failed</td>
</tr>
</tbody>
</table>

**Direct laryngoscopy**

Grades 1 to 4 refer to the view as described by Cormack & Lehane⁴.

It may be useful to consider modified categorisation as described by Cook⁶. Please consider including in “Comments” box if relevant.
Modified C&L grade | Description | Direct laryngoscopy was
---|---|---
1 | Most of cords visible | Easy
2a | Posterior part of cords visible | Easy
2b | Arytenoids only visible | Restricted
3a | Epiglottis visible and liftable | Restricted
3b | Epiglottis visible and adherent | Difficult
4 | No laryngeal structures seen | Difficult


**Videolaryngoscopy**
The percentage of glottic opening (POGO) score represents the portion of the glottis visualised, having a linear span from the anterior commissure to the interarytenoid notch.

**Can I record my airway assessment?**
Patient features contributing to difficulty (e.g. syndromes/ anatomical abnormalities) should be recorded in the free-text section addressing whether or not airway difficulty was predicted. A dedicated area to record airway assessment has not been included as this should be apparent when conducting a pre-operative airway assessment. Any conditions that are reversible or not obvious should be documented.

**When should I use a Difficult Airway Alert?**
Reason to report should include any clinically significant threat to the maintenance of oxygenation and/or ventilation. Consider the following suggested indications for providing an Alert.

**Suggested indications for providing a Difficult Airway Alert**
- Difficult or impossible **direct laryngoscopy:**
  - C&L 4
  - C&L 3 with difficulty passing ETT
- Difficult or impossible **videolaryngoscopy:**
  - POGO 0% or difficulty passing ETT
- **Impossible bag-mask ventilation**
- **Impossible supraglottic airway device** placement
- Any airway difficulty requiring awakening the patient and subsequent awake intubation
- Any ‘cannot intubate, cannot oxygenate’ events with or without emergency front of neck access
- Any permanent space-occupying lesions or barriers with the potential risk of airway obstruction
- Patients where an awake intubation technique was required as the primary airway management plan

**References:**
5. Clinical Excellence Division, Queensland Health 2018

**Acknowledgement:**
The Statewide Anaesthesia and Perioperative Care Clinical Network (SWAPNet) Steering Committee would like to acknowledge the Department of Anaesthesia and Perioperative Medicine, Royal Brisbane and Women’s Hospital for providing the original copy of the Difficult Airway Alert form and the significant contributions of the SWAPNet Difficult Airway Alert Working Group members including Drs Jane Elms and Libby McLellan (Co-Chairs), Nicole Fairweather, Alexander Cottle, Chris Stonell and Linda Beckmann, Ms Christina Hansson (The Viewer) and Ms Jenny Cooper and Dr Nicholas Heard (ieMR). The SWAPNet Steering Committee would also like to thank anaesthetists from across the public and private sectors in Queensland for their input and Professor Keith Greenland and Dr Pierre Bradley for their expertise and advice.