

## Background and Guidance for Glidescope™ /Video Laryngoscopy Usage in Alberta Health Services (AHS)

### Clinical Guidance and Recommendations

- Video laryngoscopy (VL) is still recommended for intubating patients with suspected or confirmed COVID-19.
- However, given current shortages, efforts to reduce consumption of disposable Glidescope™ VL blades are immediately required in order to conserve supply.
- In order to slow utilization of disposable Glidescope™ VL blades the following practice recommendations apply:
  1. Routine intubations should be performed using direct laryngoscopy wherever possible;
  2. Clinicians should maximize use of reusable Glidescope™ devices or other VL devices first wherever possible;
  3. While the Glidescope™ is a useful adjunct in an anticipated or encountered difficult airway, consideration should be made for use of other airway devices/adjuncts in managing the anticipated or encountered difficult airway wherever possible.

### Increasing use of video laryngoscopy during COVID-19 (Background)

- Use of VL as first approach with intubations has been increasing over past several years at all sites across all clinical service areas.
- VL is considered a first approach by many clinicians to provide the best chance of successful intubation, for difficult airway management, as an excellent resource for teaching, and to minimize infection transmission risk to staff by distancing from the patient during intubation.
- This change in practice from first approach using direct laryngoscopy to VL has accelerated with the Covid-19 pandemic. Many guidelines have suggested the use of VL for intubation of patients with suspect or confirmed COVID-19. As a result, usage of VL has recently seen an estimated increase of 30-40% over baseline usage.

### Current supply and historic usage patterns

- The most commonly used VL devices in the province are the Verathon© Glidescope™ single use disposable Spectrum™ blades, Glidescope Baton™ single use disposable blades, and Glidescope Titanium™ Reusable blades. Some centers use products by Karl Storz (C-Mac) and AMBU (Kingvision), and McGrath (MAC).
- See attachment for historic usage patterns and currently available stock.
- Past practices of direct purchase at the site level (other than Calgary Zone) has made collecting precise data to accurately characterize use and consumption of VL supplies difficult.
- Estimates of increase use range from 10-100% and depending on location of use. We expect larger increase in use for emergent intubations in the Emergency Department (ED) and Intensive Care Unit (ICU) and a smaller increase in the operating rooms (OR).
- Reusable Titanium™ blades are being utilized in several areas to minimize use of disposable blades.

## Supply Interruptions

- Glidescope™ disposable VL supplies are currently in very short supply. Our biggest supply shortage is with the Spectrum™ disposable VL blades. The ongoing supply of Baton™ disposable blades is not as tenuous and we currently have a larger supply on hand. Recent information from the distributor is that delivery of Spectrum™ and Baton™ disposable blades is gradually improving.
- The current interruption in supply of Spectrum™ and Baton™ disposable VL blades is due to increasing world-wide usage of Glidescope™ and significant limitations on supply of raw materials for the Spectrum™ blades (this blade has a camera built into the blade which may have implications on the complexity of manufacturing).
- Glidescope™ disposable VL supplies have historically been obtained either by purchase to central warehouse through Contracting, Procurement, and Supply Management (CPSM) (Calgary) or Direct purchase (all other zones) from the distributor (Canadian Hospital Specialties).

## Actions and Response

- A Provincial Glidescope™ Task Force has been established to coordinate a provincial response to this issue. Deliverables of this Task Force include: maximizing the distribution and use of video laryngoscopy equipment and supplies across the province; examining supplies available across the province and share stockpiles when necessary; developing clinical guidance to support the use of Glidescope™; and consider other strategies for managing both reusable and disposable blades to mitigate the challenges.
- Agreement has been reached with all zones to centralize procurement and distribution through (CPSM). Going forward, individual sites will not be directly purchasing these products.
- Zones are working internally to utilize reusable blades as much as possible, and to optimize distribution of all Glidescope™ equipment. It is felt that utilization of disposable blades can be significantly reduced with this approach.
- The Glidescope™ Task Force is actively looking into whether or not the disposable blades can be sterilized and reused. Unfortunately there are significant complexities to developing a standardized approved cleaning process and stringent regulations that would need to be satisfied before reprocessing would be a viable option. Based on Glidescope™ Task Force deliberations, we do not recommend saving disposable blades for potential re-use at this time. This decision about whether or not to start saving disposable blades will be reviewed weekly as we closely monitor our ongoing usage and new supplies.
- CPSM will continue to work with vendors and distributors to optimize the sourcing of needed products as much as possible.