

Purpose:

To define the required QI metrics and system reporting for LEMSAs who wish to include use of an EMS Authority approved Supraglottic Airway Device (SAD) by paramedics in their Local Optional Scope of Practice.

Definition:

Supraglottic airway device (SAD): An FDA approved device inserted into the upper airway to assist in ventilations.

Required metrics for every SAD use:

1. Rescue device? – yes / no / not documented

Rescue device is defined as a device used after failure of the initial device attempted for secondary airway management, after bag-mask-ventilation.

2. Successful placement? – yes / no / not documented

Successful placement is defined as the ability to ventilate the patient with minimal or no air leak, confirmed primarily with ETCO₂ measurement with capnography. Secondary confirmation methods include visible chest rise during ventilation and air movement on pulmonary auscultation.

3. Number of attempts – numeric in integers / not documented

Attempt is defined as insertion of the supraglottic airway device (SAD) into the mouth.

4. Time to insertion (*optional*) – numeric in seconds / not documented

Time to insertion is defined as the time from insertion of the supraglottic airway device into the mouth for the first attempt until the time of the first successful ventilation with minimal or no air leak.

5. Complications

- Regurgitation/emesis? – yes / no / not documented

Regurgitation/emesis is defined as the presence of gastric contents noted in the oropharynx or on device during or after placement.

- Bleeding/trauma? – yes / no / not documented

Trauma/bleeding is defined as the presence of blood noted in the oropharynx or on the device during or after placement, or any abrasion, laceration, dental trauma or other trauma occurring during

placement or repositioning of the device. This excludes bleeding or trauma present prior to attempted device placement.

- Hypoxia? – yes / no / not documented

Hypoxia is defined as any O₂ saturation ≤ 90% during or after placement in a patient previously normoxic prior to placement.

- Dislodgement? – yes / no / not documented

Dislodgement is defined as loss of the ability to adequately ventilate the patient after successful placement was achieved.

6. If dislodgement after placement, successful replacement? – yes / no / not documented / not applicable

Successful replacement is defined as the ability to ventilate the patient with minimal or no air leak, after dislodgement and replacement of the same device, confirmed primarily with ETCO₂ measurement with capnography. Secondary confirmation methods include visible chest rise during ventilation and air movement on pulmonary auscultation.

System metrics:

1. Percent successful placement of supraglottic airway device (SAD).
Numerator: # successful attempts = yes, Denominator: # of patients in whom SAD placement was attempted
2. Percent first-attempt success.
Numerator: # successful attempts = yes with attempts =1, Denominator: # of patients in whom SAD placement was attempted
3. Percent of each complication (emesis, trauma, hypoxia, dislodgement) and of total complications.
Numerator: # with complication = yes, Denominator: # of patients in whom SAD placement was attempted
4. Median time to insertion (if collected)

* Use of a supraglottic airway device as a rescue device (e.g. for failed intubation) should also be reported separately from initial device use.