

2022 American Society of Anesthesiologists Practice Guidelines for Management of the Difficult Airway: Supplement 5 – Organizational Member Survey Results

Table 1. American Society of Anesthesiologists (ASA): Member Survey Results (Response Rate = 4%)

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
<i>Evaluation of the Airway</i>						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	219	93*	6	1	0	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	219	91*	9	0	0	0
<i>Preparation for Difficult Airway Management</i>						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	220	86*	11	2	0	1
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	219	73*	21	5	0	0
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	220	85*	12	2	0	0
<i>Anticipated Difficult Airway Management</i>						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	199	81*	18	1	0	0
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficult ventilation (face mask/SGA) is anticipated.	198	60*	26	9	5	0
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	199	36	36*	23	5	1
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	198	46	34*	16	4	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	199	63*	27	7	3	0
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	200	69*	27	5	0	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	200	66*	30	4	0	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	200	90*	10	1	0	0

5c. Provide and test mask ventilation between attempts.	200	62 ⁺	28	10	1	0
5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	200	62 ⁺	32	6	1	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	198	67 ⁺	29	3	1	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	200	85 ⁺	14	1	1	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	198	73 ⁺	24	3	0	0
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	186	75 ⁺	23	2	1	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	186	66 ⁺	33	2	0	0
8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	185	67 ⁺	31	2	0	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	186	66 ⁺	30	4	0	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	186	90 ⁺	10	1	0	0
8c. Provide and test mask ventilation between attempts.	186	65 ⁺	26	8	1	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	186	67 ⁺	28	4	1	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	184	70 ⁺	28	2	0	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	185	83 ⁺	16	1	0	0
9b. Assure that an invasive airway is performed as rapidly as possible.	185	62 ⁺	28	8	2	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	185	74 ⁺	24	3	0	0
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	185	91 ⁺	9	1	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	185	72 ⁺	24	3	0	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	182	81 ⁺	19	0	0	0
13. Assure that a skilled individual is present to assist with extubation.	182	71 ⁺	24	4	1	0
14. Select an appropriate time and location for extubation when possible.	182	76 ⁺	22	2	0	0

15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	182	60*	29	10	1	0
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	181	40	34*	23	2	1
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	179	67*	23	2	4	3
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	181	77*	20	2	0	1
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	181	88*	12	1	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	181	91*	9	0	0	0

* An asterisk beside a percentage score indicates the median.

Table 2. All India Difficult Airway Association (AIDAA): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Evaluation of the Airway						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	73	95*	5	0	0	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	73	93*	7	0	0	0
Preparation for Difficult Airway Management						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	73	90*	10	0	0	0
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	73	78*	22	0	0	0
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	73	84*	14	3	0	0
Anticipated Difficult Airway Management						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	73	84*	14	3	0	0
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation	66	79*	21	0	0	0

and- Difficult ventilation (face mask/SGA) is anticipated.						
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	65	49	28 [†]	15	8	0
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	66	62 [†]	24	8	6	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	62	66 [†]	26	8	0	0
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	66	67 [†]	24	9	0	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	66	42	41 [†]	11	6	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	62	45 [†]	44	11	0	0
5c. Provide and test mask ventilation between attempts.	65	63 [†]	28	8	2	0
5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	66	71 [†]	27	0	2	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	65	72 [†]	28	0	0	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	65	57 [†]	38	5	0	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	65	57 [†]	26	12	5	0
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	61	69 [†]	28	2	2	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	61	59 [†]	30	8	3	0
8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	61	57 [†]	39	3	0	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	62	42	42 [†]	13	3	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	62	82 [†]	18	0	0	0
8c. Provide and test mask ventilation between attempts.	62	73 [†]	23	3	2	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	61	79 [†]	20	2	0	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	61	66 [†]	34	0	0	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	62	71 [†]	26	3	0	0

9b. Assure that an invasive airway is performed as rapidly as possible.	62	69*	26	5	0	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	61	52*	39	8	0	0
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	61	85*	15	0	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	60	45	43*	8	3	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	61	79*	21	0	0	0
13. Assure that a skilled individual is present to assist with extubation.	60	67*	30	2	2	0
14. Select an appropriate time and location for extubation when possible.	61	70*	25	3	2	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	60	72*	28	0	0	0
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	61	44	39*	15	2	0
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	61	66*	28	2	5	0
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	61	66*	34	0	0	0
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	60	85*	15	0	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	60	97*	3	0	0	0

* An asterisk beside a percentage score indicates the median.

Table 3. European Airway Management Society (EAMS): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Evaluation of the Airway						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	79	84*	14	0	0	3
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	79	77*	19	1	0	3
Preparation for Difficult Airway Management						

2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	78	83*	13	1	0	3
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	77	78*	14	6	0	1
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	79	87*	10	0	0	3
Anticipated Difficult Airway Management						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	71	79*	20	0	0	1
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficult ventilation (face mask/SGA) is anticipated.	71	76*	20	4	0	0
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	70	49	36*	11	4	0
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	71	45	35*	17	3	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	70	66*	27	4	1	1
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	71	59*	37	4	0	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	69	62*	32	6	0	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	70	83*	17	0	0	0
5c. Provide and test mask ventilation between attempts.	71	59*	32	7	1	0
5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	71	77*	17	4	1	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	70	69*	27	3	1	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	69	81*	16	3	0	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	71	70*	25	4	0	0
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	69	64*	30	3	1	1
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	68	57*	37	4	0	1

8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	68	71*	24	4	0	1
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	69	65*	25	9	0	1
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	69	87*	12	1	0	0
8c. Provide and test mask ventilation between attempts.	68	66*	29	4	0	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	69	81*	14	3	1	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	67	79*	18	0	3	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	68	79*	18	0	3	0
9b. Assure that an invasive airway is performed as rapidly as possible.	69	61*	35	4	0	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	68	71*	25	1	1	1
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	69	88*	10	0	0	1
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	69	51*	38	12	0	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	68	75*	22	3	0	0
13. Assure that a skilled individual is present to assist with extubation.	68	60*	31	6	3	0
14. Select an appropriate time and location for extubation when possible.	68	63*	34	3	0	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	67	52*	40	7	0	0
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	68	47	35*	13	4	0
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	68	50*	28	16	4	1
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	68	71*	26	3	0	0
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	67	93*	7	0	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	67	96*	4	0	0	0

* An asterisk beside a percentage score indicates the median.

Table 4. Italian Society of Anesthesiology, Analgesia, Resuscitation and Intensive Care Societa (SIAARTI): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Evaluation of the Airway						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	177	79*	19	2	1	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	176	82*	16	1	0	0
Preparation for Difficult Airway Management						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	172	80*	20	0	0	0
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	172	62*	29	7	2	0
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	171	82*	16	2	0	0
Anticipated Difficult Airway Management						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	147	82*	15	2	1	0
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficult ventilation (face mask/SGA) is anticipated.	147	60*	31	7	2	0
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	148	36	39*	18	7	1
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	148	44	33*	15	8	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	148	59*	26	9	5	1
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	147	56*	38	5	0	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	147	44	41*	13	1	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	147	83*	15	2	0	0
5c. Provide and test mask ventilation between attempts.	148	64*	27	7	1	0

5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	148	74 ⁺	25	1	1	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	146	57 ⁺	40	2	1	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	148	70 ⁺	26	2	1	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	147	63 ⁺	29	6	2	0
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	123	66 ⁺	27	7	1	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	123	48 ⁺	41	7	4	0
8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	123	56 ⁺	35	9	0	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	123	45	46 ⁺	7	2	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	123	84 ⁺	15	1	1	0
8c. Provide and test mask ventilation between attempts.	122	68 ⁺	24	7	0	1
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	122	80 ⁺	19	0	1	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	123	75 ⁺	22	2	1	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	123	77 ⁺	19	2	2	0
9b. Assure that an invasive airway is performed as rapidly as possible.	123	64 ⁺	28	7	1	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	124	65 ⁺	27	6	2	0
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	122	85 ⁺	13	2	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	120	53 ⁺	34	10	3	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	121	62 ⁺	34	3	1	0
13. Assure that a skilled individual is present to assist with extubation.	121	55 ⁺	34	11	1	0
14. Select an appropriate time and location for extubation when possible.	121	65 ⁺	31	3	0	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange	121	44	43 ⁺	10	3	0

catheter and/or SGA that can serve as a guide for expedited reintubation.

16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy. 121 34 31* 22 12 0

17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness. 121 52* 33 4 8 2

18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated. 121 64* 31 3 0 1

Follow-up Care

19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care. 121 83* 16 1 1 0

20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care. 121 88* 10 2 0 0

* An asterisk beside a percentage score indicates the median.

Table 5. Learning, Teaching and Investigation Difficult Airway Group [FIDIVA]: Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Evaluation of the Airway						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	24	79*	13	8	0	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	24	83*	13	4	0	0
Preparation for Difficult Airway Management						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	24	96*	0	0	4	0
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	24	92*	4	4	0	0
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	24	96*	4	0	0	0
Anticipated Difficult Airway Management						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	22	95*	5	0	0	0
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation	21	62*	33	5	0	0

and- Difficult ventilation (face mask/SGA) is anticipated.						
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	22	64 ⁺	36	0	0	0
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	22	64 ⁺	32	5	0	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	22	73 ⁺	27	0	0	0
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	22	68 ⁺	32	0	0	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	22	68 ⁺	32	0	0	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	22	91 ⁺	9	0	0	0
5c. Provide and test mask ventilation between attempts.	22	68 ⁺	27	5	0	0
5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	22	91 ⁺	9	0	0	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	22	82 ⁺	18	0	0	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	22	95 ⁺	5	0	0	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	22	86 ⁺	14	0	0	0
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	19	79 ⁺	21	0	0	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	19	63 ⁺	37	0	0	0
8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	19	74 ⁺	26	0	0	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	19	68 ⁺	26	5	0	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	19	95 ⁺	5	0	0	0
8c. Provide and test mask ventilation between attempts.	19	79 ⁺	21	0	0	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	19	89 ⁺	11	0	0	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	19	79 ⁺	21	0	0	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	19	95 ⁺	5	0	0	0

9b. Assure that an invasive airway is performed as rapidly as possible.	19	68*	26	5	0	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	19	79*	21	0	0	0
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	19	89*	11	0	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	19	58*	37	5	0	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	19	89*	5	5	0	0
13. Assure that a skilled individual is present to assist with extubation.	19	63*	32	5	0	0
14. Select an appropriate time and location for extubation when possible.	19	79*	21	0	0	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	19	63*	21	16	0	0
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	18	61*	22	17	0	0
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	19	58*	37	0	5	0
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	19	68*	32	0	0	0
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	19	100*	0	0	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	19	100*	0	0	0	0

* An asterisk beside a percentage score indicates the median.

Table 6. Society for Airway Management (SAM): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Evaluation of the Airway						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	70	93*	7	0	0	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	70	90*	10	0	0	0
Preparation for Difficult Airway Management						

2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	69	78*	19	3	0	0
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	70	80*	19	1	0	0
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	69	88*	10	0	1	0
Anticipated Difficult Airway Management						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	64	89*	11	0	0	0
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficult ventilation (face mask/SGA) is anticipated.	64	78*	17	5	0	0
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	64	55*	30	11	5	0
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	64	52*	31	13	5	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	64	67*	22	6	3	2
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	63	63*	32	3	2	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	64	63*	34	2	2	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	64	91*	9	0	0	0
5c. Provide and test mask ventilation between attempts.	64	53*	34	9	3	0
5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	63	78*	19	2	0	2
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	64	69*	28	3	0	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	64	72*	25	2	2	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	64	67*	27	2	2	3
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	60	63*	30	5	2	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	60	65*	32	3	0	0

8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	58	64*	33	3	0	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	60	58*	37	3	2	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	60	80*	20	0	0	0
8c. Provide and test mask ventilation between attempts.	60	53*	32	12	2	2
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	60	75*	22	0	3	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	59	71*	27	2	0	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	58	71*	24	3	2	0
9b. Assure that an invasive airway is performed as rapidly as possible.	59	63*	32	3	0	2
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	59	63*	34	2	0	2
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	58	86*	14	0	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	58	62*	36	0	0	2
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	59	80*	20	0	0	0
13. Assure that a skilled individual is present to assist with extubation.	59	63*	36	2	0	0
14. Select an appropriate time and location for extubation when possible.	59	68*	32	0	0	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	59	64*	36	0	0	0
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	58	45	38*	12	5	0
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	59	58*	29	3	7	3
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	59	64*	36	0	0	0
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	57	82*	18	0	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	57	91*	7	0	0	2

* An asterisk beside a percentage score indicates the median.

Table 7. Society for Ambulatory Anesthesia (SAMBA): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
<i>Evaluation of the Airway</i>						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	47	94*	2	0	0	4
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	47	91*	4	0	2	2
<i>Preparation for Difficult Airway Management</i>						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	47	83*	15	0	0	2
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	47	79*	15	4	0	2
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	47	87*	11	0	0	2
<i>Anticipated Difficult Airway Management</i>						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	39	95*	5	0	0	0
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficult ventilation (face mask/SGA) is anticipated.	40	63*	23	15	0	0
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	40	45	35*	15	5	0
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	40	55*	33	8	3	3
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	40	80*	18	3	0	0
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	40	80*	20	0	0	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	40	75*	23	3	0	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	40	93*	8	0	0	0
5c. Provide and test mask ventilation between attempts.	40	48*	45	5	3	0

5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	40	65 ⁺	33	3	0	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	40	60 ⁺	35	5	0	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	40	83 ⁺	15	3	0	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	40	70 ⁺	28	3	0	0
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	37	78 ⁺	22	0	0	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	36	81 ⁺	19	0	0	0
8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	37	81 ⁺	19	0	0	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	37	81 ⁺	19	0	0	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	37	89 ⁺	11	0	0	0
8c. Provide and test mask ventilation between attempts.	37	62 ⁺	30	5	3	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	37	86 ⁺	11	3	0	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	37	73 ⁺	24	3	0	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	37	86 ⁺	11	3	0	0
9b. Assure that an invasive airway is performed as rapidly as possible.	37	54 ⁺	32	11	3	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	37	65 ⁺	32	0	3	0
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	37	92 ⁺	8	0	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	37	70 ⁺	27	0	3	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	37	89 ⁺	11	0	0	0
13. Assure that a skilled individual is present to assist with extubation.	37	73 ⁺	22	5	0	0
14. Select an appropriate time and location for extubation when possible.	37	76 ⁺	22	3	0	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange	37	68 ⁺	27	5	0	0

catheter and/or SGA that can serve as a guide for expedited reintubation.

16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy. 37 43 38* 8 11 0

17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness. 37 65* 27 3 5 0

18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated. 37 81* 19 0 0 0

Follow-up Care

19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care. 36 97* 3 0 0 0

20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care. 36 100* 0 0 0 0

* An asterisk beside a percentage score indicates the median.

Table 8. Society for Head and Neck Anesthesia (SHANA): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Evaluation of the Airway						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	27	100*	0	0	0	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	27	96*	4	0	0	0
Preparation for Difficult Airway Management						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	27	96*	4	0	0	0
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	27	78*	15	7	0	0
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	27	74*	19	7	0	0
Anticipated Difficult Airway Management						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	24	88*	13	0	0	0
4a. When appropriate, perform awake intubation and- Difficult ventilation (face mask/SGA) is anticipated.	24	75*	17	8	0	0

4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	24	54 ⁺	25	17	4	0
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	24	67 ⁺	21	8	4	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	24	58 ⁺	13	21	8	0
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	24	58 ⁺	33	4	4	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	24	63 ⁺	33	4	0	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	24	79 ⁺	21	0	0	0
5c. Provide and test mask ventilation between attempts.	23	57 ⁺	26	9	9	0
5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	24	63 ⁺	38	0	0	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	24	63 ⁺	29	4	4	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	24	83 ⁺	17	0	0	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	24	54 ⁺	38	8	0	0
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	23	74 ⁺	22	0	4	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	23	52 ⁺	35	13	0	0
8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	23	57 ⁺	35	4	4	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	23	43	48 ⁺	9	0	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	23	65 ⁺	30	4	0	0
8c. Provide and test mask ventilation between attempts.	22	64 ⁺	23	9	5	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	23	61 ⁺	35	4	0	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	22	68 ⁺	23	9	0	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	22	86 ⁺	14	0	0	0
9b. Assure that an invasive airway is performed as rapidly as possible.	22	64 ⁺	18	9	5	5

9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	22	55*	27	9	5	5
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	22	82*	18	0	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	22	64*	32	5	0	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	22	91*	9	0	0	0
13. Assure that a skilled individual is present to assist with extubation.	22	77*	18	5	0	0
14. Select an appropriate time and location for extubation when possible.	22	77*	18	5	0	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	22	41	50*	5	0	5
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	22	41	50*	5	5	0
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	22	45	41*	0	9	5
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	22	68*	32	0	0	0
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	22	95*	5	0	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	22	100*	0	0	0	0

* An asterisk beside a percentage score indicates the median.

Table 9. Society for Pediatric Anesthesia (SPA): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Evaluation of the Airway						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	268	90*	9	1	0	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	268	79*	19	1	0	0
Preparation for Difficult Airway Management						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or	257	91*	7	1	0	0

immediately available to assist with airway management.

2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway. 259 78⁺ 19 3 0 0

2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation. 259 76⁺ 21 2 1 0

Anticipated Difficult Airway Management

3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure. 233 78⁺ 17 4 0 0

4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficult ventilation (face mask/SGA) is anticipated. 232 44 30⁺ 20 5 1

4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated. 232 29 38⁺ 19 11 3

4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- The patient is likely incapable of tolerating a brief apneic episode is anticipated. 231 29 43⁺ 17 10 1

4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated. 230 52⁺ 30 10 7 1

5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management. 230 72⁺ 24 3 0 0

5a. If difficulty is encountered with individual techniques, combination techniques may be performed. 231 67⁺ 29 4 0 0

5b. Be aware of the passage of time, number of attempts, and oxygen saturation. 231 85⁺ 14 0 0 0

5c. Provide and test mask ventilation between attempts. 231 64⁺ 29 5 1 0

5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications. 232 66⁺ 31 3 0 0

6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention. 229 62⁺ 32 4 1 0

6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible. 231 86⁺ 13 0 0 0

6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention. 229 66⁺ 30 4 0 0

Unanticipated and Emergency Difficult Airway Management

7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing. 219 72⁺ 26 3 0 0

7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management. 219 66⁺ 30 3 1 0

8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	217	72*	24	3	0	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	218	72*	24	4	0	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	217	86*	14	0	0	0
8c. Provide and test mask ventilation between attempts.	218	67*	28	4	0	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	219	72*	25	3	0	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	216	73*	24	2	1	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	219	84*	14	1	0	0
9b. Assure that an invasive airway is performed as rapidly as possible.	219	55*	32	12	1	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	215	65*	32	2	0	0
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	218	89*	10	0	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	217	67*	30	2	1	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	218	85*	13	1	0	0
13. Assure that a skilled individual is present to assist with extubation.	218	84*	15	1	0	0
14. Select an appropriate time and location for extubation when possible.	218	84*	15	0	0	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	218	62*	31	6	1	0
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	218	42	43*	14	1	0
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	218	58*	32	4	5	1
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	218	72*	26	1	0	0
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	215	90*	9	0	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	216	95*	5	0	0	0

* An asterisk beside a percentage score indicates the median.

Table 10. Society of Critical Care Anesthesiologists (SOCCA): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
<i>Evaluation of the Airway</i>						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	85	91 [†]	7	1	1	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	85	88 [†]	8	2	1	0
<i>Preparation for Difficult Airway Management</i>						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	80	83 [†]	15	1	1	0
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	80	65 [†]	29	5	1	0
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	80	81 [†]	18	0	0	1
<i>Anticipated Difficult Airway Management</i>						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	77	75 [†]	18	6	0	0
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficult ventilation (face mask/SGA) is anticipated.	77	60 [†]	32	8	0	0
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	77	32	36 [†]	19	12	0
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	77	45	36 [†]	16	3	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	77	65 [†]	26	8	1	0
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	77	57 [†]	29	14	0	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	77	57 [†]	31	10	0	1
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	77	88 [†]	10	0	0	1

5c. Provide and test mask ventilation between attempts.	75	49	39*	11	1	0
5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	77	57*	30	12	1	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	77	51*	42	6	0	1
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	76	79*	18	1	0	1
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	77	61*	31	4	3	1
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	72	72*	21	3	4	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	72	63*	36	0	0	1
8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	71	65*	28	6	0	1
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	71	61*	31	8	0	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	70	87*	13	0	0	0
8c. Provide and test mask ventilation between attempts.	71	58*	31	10	1	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	70	61*	29	9	1	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	70	70*	29	1	0	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	69	78*	22	0	0	0
9b. Assure that an invasive airway is performed as rapidly as possible.	70	63*	27	7	3	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	70	59*	34	6	1	0
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	72	85*	11	1	3	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	72	69*	25	4	0	1
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	72	79*	18	1	0	1
13. Assure that a skilled individual is present to assist with extubation.	71	70*	20	7	1	1
14. Select an appropriate time and location for extubation when possible.	72	81*	17	3	0	0

15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	71	45	38*	14	3	0
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	72	39	36*	21	4	0
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	72	60*	22	8	6	4
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	72	69*	26	3	0	1
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	72	86*	14	0	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	72	96*	4	0	0	0

* An asterisk beside a percentage score indicates the median.

Table 11. Trauma Anesthesiology Society (TAS): Member Survey Results

Recommendations	N	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Evaluation of the Airway						
1a. Before the initiation of anesthetic care or airway management, assure that an airway risk assessment is performed by the person(s) responsible for airway management whenever feasible to identify patient, medical, surgical, environmental, and anesthetic factors (e.g., risk of aspiration) that may indicate the potential for a difficult airway.	21	100*	0	0	0	0
1b. Before the initiation of anesthetic care or airway management, conduct an airway physical examination.	21	86*	14	0	0	0
Preparation for Difficult Airway Management						
2a. If a difficult airway is known or suspected, assure that a skilled individual is present or immediately available to assist with airway management.	21	95*	5	0	0	0
2b. If a difficult airway is known or suspected, inform the patient or responsible person of the special risks and procedures pertaining to management of the difficult airway.	21	76*	19	5	0	0
2c. If a difficult airway is known or suspected, administer oxygen before initiating management of the difficult airway and deliver supplemental oxygen throughout the process of difficult airway management, including extubation.	21	90*	0	5	5	0
Anticipated Difficult Airway Management						
3. Identify a strategy for (1) awake intubation, (2) the patient who can be adequately ventilated but is difficult to intubate, (3) the patient who cannot be ventilated or intubated, and (4) alternative approaches to airway management failure.	16	81*	19	0	0	0
4a. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation	16	50	38*	6	6	0

and- Difficult ventilation (face mask/SGA) is anticipated.						
4b. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Increased risk of aspiration is anticipated.	16	19	31*	31	13	6
4c. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and-The patient is likely incapable of tolerating a brief apneic episode is anticipated.	16	44	38*	13	6	0
4d. When appropriate, perform awake intubation if the patient is suspected to be a difficult intubation and- Difficulty with emergency invasive airway rescue is anticipated.	16	63*	25	6	6	0
5. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	16	56*	31	13	0	0
5a. If difficulty is encountered with individual techniques, combination techniques may be performed.	16	56*	44	0	0	0
5b. Be aware of the passage of time, number of attempts, and oxygen saturation.	16	94*	6	0	0	0
5c. Provide and test mask ventilation between attempts.	16	63*	19	19	0	0
5d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	16	63*	31	6	0	0
6. If an elective invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is selected, identify a preferred intervention.	16	69*	25	6	0	0
6a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	16	63*	38	0	0	0
6b. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	16	56*	38	0	0	6
Unanticipated and Emergency Difficult Airway Management						
7a. Upon encountering an unanticipated difficult airway determine the benefit of waking and/or restoring spontaneous breathing.	16	56*	44	0	0	0
7b. Upon encountering an unanticipated difficult airway determine the benefit of a noninvasive versus invasive approach to airway management.	16	50	38*	0	13	0
8. If a noninvasive approach is selected, identify a preferred sequence of noninvasive devices to use for airway management.	16	63*	31	6	0	0
8a. If difficulty is encountered with individual techniques, combination techniques may be performed.	16	63*	38	0	0	0
8b. Be aware of the passage of time, number of attempts, and oxygen saturation.	16	88*	6	6	0	0
8c. Provide and test mask ventilation between attempts.	16	56*	25	19	0	0
8d. Limit the number of attempts at tracheal intubation or SGA placement to avoid potential injury and complications.	16	69*	31	0	0	0
9. If an invasive approach to the airway (e.g., surgical cricothyroidotomy, tracheostomy, or large bore cannula cricothyroidotomy) is necessary (i.e., cannot intubate, cannot ventilate), identify a preferred intervention.	16	75*	25	0	0	0
9a. Assure that an invasive airway is performed by an individual trained in invasive airway techniques, whenever possible.	16	69*	31	0	0	0

9b. Assure that an invasive airway is performed as rapidly as possible.	16	56*	38	6	0	0
9c. If the selected invasive approach fails or is not feasible, identify an alternative invasive intervention.	16	69*	25	0	6	0
Confirmation of Tracheal Intubation						
10. Confirm tracheal intubation using capnography or end-tidal carbon dioxide monitoring.	16	94*	6	0	0	0
11. When uncertain about the location of the tracheal tube, determine whether to either remove it and attempt ventilation or use additional techniques to confirm positioning of tracheal tube.	16	63*	38	0	0	0
Extubation of the Difficult Airway						
12. Have a preformulated strategy for extubation and subsequent airway management.	15	87*	13	0	0	0
13. Assure that a skilled individual is present to assist with extubation.	15	73*	20	7	0	0
14. Select an appropriate time and location for extubation when possible.	15	67*	27	0	7	0
15. Assess the relative clinical merits and feasibility of the short-term use of an airway exchange catheter and/or SGA that can serve as a guide for expedited reintubation.	15	60*	33	7	0	0
16. Before attempting extubation, evaluate the risks and benefits of elective surgical tracheostomy.	15	40	33*	20	7	0
17. Evaluate the risks and benefits of awake extubation versus extubation before the return to consciousness.	15	67*	27	0	7	0
18. Assess the clinical factors that may produce an adverse impact on ventilation after the patient has been extubated.	15	73*	20	0	7	0
Follow-up Care						
19. Inform the patient (or responsible person) of the airway difficulty that was encountered to provide the patient (or responsible person) with a role in guiding and facilitating the delivery of future care.	15	80*	20	0	0	0
20. Document the presence and nature of the airway difficulty in the medical record to guide and facilitate the delivery of future care.	14	100*	0	0	0	0

* An asterisk beside a percentage score indicates the median.