



Bijlage: TROOPS Comprehensive Research Tool



TROOPS Comprehensive Research Tool



International Committee for the Advancement of Procedural Sedation^a
www.TROOPS-sedation.com

No adverse events during sedation or recovery. (form completed)
 Yes, unplanned interventions or outcomes occurred. (check all that apply below)

	Minor	Intermediate	Sentinel	Suspected Etiology
Airway & Breathing	<input type="checkbox"/> Increased or added supplemental oxygen <input type="checkbox"/> Airway repositioning <input type="checkbox"/> Tactile stimulation <input type="checkbox"/> Suctioning for hypersalivation <input type="checkbox"/> Anticholinergic for hypersalivation <input type="checkbox"/> Nasal airway	<input type="checkbox"/> Positive pressure ventilation ^b <input type="checkbox"/> Naloxone or flumazenil <input type="checkbox"/> Oral airway	<input type="checkbox"/> Tracheal intubation <input type="checkbox"/> Neuromuscular blockade <input type="checkbox"/> Pulmonary aspiration ^c	<input type="checkbox"/> Apnea ^d <input type="checkbox"/> Respiratory depression ^e <input type="checkbox"/> Upper airway obstruction ^f <input type="checkbox"/> Laryngospasm ^g <input type="checkbox"/> Oxygen desaturation <input type="checkbox"/> Abnormal capnography
Circulation		<input type="checkbox"/> Bolus IV fluids	<input type="checkbox"/> Chest compressions <input type="checkbox"/> Vasoactive drug administration <input type="checkbox"/> Death	<input type="checkbox"/> Hypotension <input type="checkbox"/> Hypertension <input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac arrest
GI	<input type="checkbox"/> Anti-emetic for nausea/vomiting <input type="checkbox"/> Suctioning for emesis			<input type="checkbox"/> Nausea <input type="checkbox"/> Vomiting
Neuro	<input type="checkbox"/> Additional sedative for myoclonus / rigidity	<input type="checkbox"/> Anticonvulsant administration	<input type="checkbox"/> Neurological deficit	<input type="checkbox"/> Seizure or seizure-like movements <input type="checkbox"/> Myoclonus / muscle rigidity
Allergy	<input type="checkbox"/> Administration of antihistamine	<input type="checkbox"/> Administration of inhaled β -agonist <input type="checkbox"/> Administration of epinephrine (adrenaline) for anaphylaxis		<input type="checkbox"/> Allergic reaction <input type="checkbox"/> Anaphylaxis
Sedation Quality & Patient Experience		<input type="checkbox"/> Sedation insufficient <input type="checkbox"/> Escalation of care or hospitalization ^h <input type="checkbox"/> Provider dissatisfied <input type="checkbox"/> Patient/family dissatisfied		<input type="checkbox"/> Patient active resistance or need for restraint ⁱ <input type="checkbox"/> Sedation complication <input type="checkbox"/> Paradoxical response ^j <input type="checkbox"/> Unpleasant recovery reaction/agitation ^k <input type="checkbox"/> Unpleasant recall

Other _____ Other _____

Fig 2. Paper-form version of the TROOPS comprehensive research tool. TROOPS, Tracking and Reporting Outcomes of Procedural Sedation. An on-line version is available at www.TROOPS-sedation.com.

MINOR items pose little risk given appropriate sedation provider skills and monitoring.

INTERMEDIATE items can endanger patients if not promptly managed, or reflect suboptimal sedation quality or patient experience and warrant timely reporting with peer scrutiny.

SENTINEL items are life-threatening and warrant immediate reporting and the highest level of peer scrutiny.

FOOTNOTES/DEFINITIONS

- a. The goal of the Tracking and Reporting Outcomes Of Procedural Sedation (TROOPS) comprehensive research tool is to provide a standardized and practical tool to record procedural sedation adverse events, interventions, and outcomes. It is also possible that in specific clinical settings (e.g., newer sedation programs) it may be deemed appropriate to track some of these items for routine clinical practice. This tool is intended for use by all types of sedation providers in all locations and for patients of all ages. It was developed by multidisciplinary consensus from the *International Committee for the Advancement of Procedural Sedation* (www.ProceduralSedation.org). Its elements can readily be incorporated into electronic medical records. TROOPS intentionally excludes timed event durations and specific thresholds (e.g., vital signs, oxygen desaturation, capnography) in favor of interventions and outcomes, which are more objective, clinically relevant, and more reliably recorded.
- b. Positive pressure ventilation (PPV) includes bag-mask ventilation (BMV), bilevel positive airway pressure (BiPAP), continuous positive airway pressure (CPAP) and laryngeal mask airway (LMA).
- c. Pulmonary aspiration is inhalation of oropharyngeal or gastric contents into the trachea during sedation or recovery and the appearance of new respiratory signs and symptoms.
- d. Apnea is cessation of ventilatory effort.
- e. Respiratory depression is decrease in ventilatory effort.
- f. Upper airway obstruction is partial or complete obstruction of the upper airway responsive to airway positioning or oral/nasal airway placement.
- g. Laryngospasm is partial or complete closure of the vocal cords that is not responsive to airway repositioning or oral/nasal airway placement.
- h. Escalation of care includes significant prolongation of clinical care (including delayed discharge) or hospitalization due to sedation factors, including transfer to a higher level of care.
- i. Need for restraint is more than minor physical restraint on more than one, brief occasion.
- j. Paradoxical response is an unanticipated restlessness or agitation in response to sedatives.
- k. Unpleasant recovery reaction/agitation is abnormal behaviors during the recovery stage of sedation (e.g., agitation, delirium, hallucinations) which are distressing to the patient or providers.

Fig 2. Continued.