Additional file 3

Rognås et al., "Refraining from pre-hospital advanced airway management: a prospective observational study from an anaesthesiologist-staffed pre-hospital critical care service."

Non-cardiac arrest patients with an initial GSC<9 where pre-hospital advanced

airway management (PHAAM) where not performed

Patient category	PHAAM not performed Number(%)	Physicians' reasons for not performing PHAAM Number*		Alternative airway management method used Number	
Trauma (n=134)	9 (6.7)	Patients condition Short transport time to ED** Expected difficult PHETI***	8 2 1	Spontaneous respiration, no assistance Spontaneous respiration+ oropharyngeal airway Bag-mask ventilation, no adjuncts Bag-mask ventilation+oropharyngeal airway	2 1 4 2
SAH**** / stroke (n=70)	28 (40.0)	Patients condition Co-morbidity Short transport time to ED Expected difficult PHETI Difficult access to patient	13 15 10 3 1	Spontaneous respiration, no assistance Spontaneous respiration+ jaw trust /chin lift Spontaneous respiration+ oropharyng. airway Bag-mask ventilation, no adjuncts Bag-mask ventilation+ oropharyngeal airway	12 5 5 3 3
Asthma / COPD***** (n=30)	9 (30.0)	Patients condition Co-morbidity	4 6	Spontaneous respiration, no assistance Bag-mask ventilation, no adjuncts Bag-mask ventilation+ oropharyngeal airway	2 4 3
Cardiology (n=8)	4 (50.0)	Patients condition Short transport time to ED Expected difficult PHETI	3 1 1	Spontaneous respiration, no assistance Spontaneous respiration+ jaw trust /chin lift Bag-mask ventilation, no adjuncts	1 1 2

^{*} More than one reason may apply to each patient

Pre-hospital critical care anaesthesiologists' reasons for not performing pre-hospital advanced airway management on cardiac arrest patients (n=271).

Reason for not performing PHAAM*	Number**	%
Patients condition	157	57.9
Co-morbidity	57	21.0
Short transport time to ED***	16	5.9
Expected difficult PHETI ****	4	1.5
Difficult access to patient	2	0.7
Lack of training	0	
Lack of equipment	0	
Lack of assistance	0	
Data missing	68	25.1

^{*}Pre-hospital advanced airway management

^{**} Emergency Department

^{***}Pre-hospital Endotracheal intubation

^{****}Subarachnoid Haemorrhage

^{*****}Chronic Obstructive Pulmonary Disease

^{**} More than one reason may apply to each patient

^{***} Emergency Department

^{****} Pre-hospital Endotracheal Intubation

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Patient categories when pre-hospital advanced airway management (PHAAM) were withheld

Reason for withholding PHAAM	Patient category*	Numbers (%)
The patient's condition (n=257)	Trauma Cardiac arrest (CA) Cardiological disease (not CA) Asthma / Chronic Obstructive Pulmonary Disease Oto-rhino-laryngological disease Subarachnoid haemorrhage / stroke Other	11 (4.3) 157 (61.1) 24 (9.3) 13 (5.1) 0 16 (6.2) 51 (19.8)
Patient comorbidity (n=107)	Trauma Cardiac arrest (CA) Cardiological disease (not CA) Asthma / Chronic Obstructive Pulmonary Disease Oto-rhino-laryngological disease Subarachnoid haemorrhage / stroke Other	2 (1.9) 57 (53.3) 5 (4.7) 18 (16.8) 0 18 (16.2) 16 (15.0)
Short transport time to ED** (n=64)	Trauma Cardiac arrest (CA) Cardiological disease (not CA) Asthma / Chronic Obstructive Pulmonary Disease Oto-rhino-laryngological disease Subarachnoid haemorrhage / stroke Other	8 (12.5) 16 (25.0) 4 (6.3) 7 (10.9) 1 (1.6) 13 (20.3) 24 (37.5)
Expected difficult PHETI*** (n=19)	Trauma Cardiac arrest (CA) Cardiological disease (not CA) Asthma / Chronic Obstructive Pulmonary Disease Oto-rhino-laryngological disease Subarachnoid haemorrhage / stroke Other	5 (26.3) 4 (21.1) 3 (15.8) 1 (5.3) 1(5.3) 3(15.8) 6 (31.6)
Difficult access to patient (n=4)	Trauma Cardiac arrest (CA) Cardiological disease (not CA) Asthma / Chronic Obstructive Pulmonary Disease Oto-rhino-laryngological disease Subarachnoid haemorrhage / stroke Other	0 2 (50.0) 0 1 (25.0) 0 1 (25.0) 1 (25.0)
No assistance available (n=4)	Trauma Cardiac arrest (CA) Cardiological disease (not CA) Asthma / Chronic Obstructive Pulmonary Disease Oto-rhino-laryngological disease Subarachnoid haemorrhage / stroke Other	1 (25.0) 0 1 (25.0) 0 1 (25.0) 1 (25.0) 0
Insufficient equipment (n=1)	Trauma Cardiac arrest (CA) Cardiological disease (not CA) Asthma / Chronic Obstructive Pulmonary Disease Oto-rhino-laryngological disease Subarachnoid haemorrhage / stroke Other	0 0 0 0 1 (100.0) 0

^{*}Patients may fall into more than one category

** Emergency Department

***Pre-hospital Endotracheal Intubation

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Alternative methods used to treat the patient when pre-hospital advanced airway management (PHAAM) were withheld or postponed

Reason for withholding PHAAM*	Alternative methods used	Numbers (%)
The patient's condition (n=257)	Spontaneous respiration, no assistance Spontaneous respiration with jaw trust /chin lift Spontaneous respiration with oropharyngeal airway Bag-valve-mask ventilation, no adjuncts Bag-valve-mask ventilation with oropharyngeal airway Missing data	47 (18.3) 6 (2.3) 16 (6.2) 124 (48.2) 50 (19.5) 14 (5.4)
Patient comorbidity (n=107)	Spontaneous respiration, no assistance Spontaneous respiration with jaw trust /chin lift Spontaneous respiration with oropharyngeal airway Bag-valve-mask ventilation, no adjuncts Bag-valve-mask ventilation with oropharyngeal airway Missing data	21 (19.6) 5 (4.7) 11 (10.3) 46 (43.0) 22 (20.6) 2 (1.9)
Short transport time to ED** (n=64)	Spontaneous respiration, no assistance Spontaneous respiration with jaw trust /chin lift Spontaneous respiration with oropharyngeal airway Bag-valve-mask ventilation, no adjuncts Bag-valve-mask ventilation with oropharyngeal airway Missing data	15 (23.4) 10 (15.6) 6 (9.4) 22 (34.4) 10 ((15.6) 1 (1.6)
Expected difficult PHETI*** (n=19)	Spontaneous respiration, no assistance Spontaneous respiration with jaw trust /chin lift Spontaneous respiration with oropharyngeal airway Bag-valve-mask ventilation, no adjuncts Bag-valve-mask ventilation with oropharyngeal airway Missing data	4 (21.1) 2 (10.5) 2 (10.5) 6 (31.6) 3 (15.8) 2 (10.5)
Difficult access to patient (n=4)	Spontaneous respiration, no assistance Spontaneous respiration with jaw trust /chin lift Spontaneous respiration with oropharyngeal airway Bag-valve-mask ventilation, no adjuncts Bag-valve-mask ventilation with oropharyngeal airway Missing data	1 (25.0) 0 0 1 (25.0) 2 (50.0)
No assistance available (n=4)	Spontaneous respiration, no assistance Spontaneous respiration with jaw trust /chin lift Spontaneous respiration with oropharyngeal airway Bag-valve-mask ventilation, no adjuncts Bag-valve-mask ventilation with oropharyngeal airway Missing data	0 2 (50.0) 0 0 1 (25.0) 1 (25.0)
Insufficient equipment (n=1)	Spontaneous respiration, no assistance Spontaneous respiration with jaw trust /chin lift Spontaneous respiration with oropharyngeal airway Bag-valve-mask ventilation, no adjuncts Bag-valve-mask ventilation with oropharyngeal airway Missing data	1 (100.0) 0 0 0 0
In total (n=456)	Spontaneous respiration, no assistance Spontaneous respiration with jaw trust /chin lift Spontaneous respiration with oropharyngeal airway Bag-valve-mask ventilation, no adjuncts Bag-valve-mask ventilation with oropharyngeal airway Missing data	89 (26.6) 25 (7.2) 35 (10.1) 199 (57.3) 88 (25.4) 20 (5.8)

^{*}Patients may fall into more than one category

^{**} Emergency Department

^{***}Pre-hospital Endotracheal Intubation