

Appendices

A – Survey questions sent to lead clinicians of UK prehospital services

Epidemiology

1. For which of the following services are you the lead clinician or medical director?:
 - a. A local British Association of Immediate Care Services, (BASICS), scheme
 - b. A UK – based Helicopter Emergency Medical Service, (HEMS)?
2. Does your HEMS or BASIC service provide, at least some of the time, pre-hospital general anaesthesia in the form of rapid sequence induction, (RSI), using at least an induction agent and muscle relaxant?
 - a. Yes
 - b. No, (if you answered *yes* please continue to question 4, if you answered *no* that is the end of the survey)
3. How many patients does your service assess and treat in the pre-hospital setting on an annual basis?
 - a. Exact number
 - b. Unknown
4. Do you maintain a database of all pre-hospital RSI's performed in your service?
 - a. Yes
 - b. No
5. If known how many RSI's are currently performed annually in your service?
 - a. Exact number
 - b. Unknown
6. If known how many RSI's are performed annually for trauma specifically?
 - a. Exact number
 - b. Unknown
7. In your service when is pre-hospital RSI available?
 - a. Always-24hrs a day
 - b. Always but daylight hours only
 - c. Sometimes
 - d. Never

Standard Operating Procedures

8. Does your service currently have and use a formal written *Standard Operating Procedure* (SOP), for pre-hospital RSI?
 - a. Yes
 - b. No (if you answered *yes* please go to question 9 if you answered *no* please answer 'N/A' until you get to question 15)
9. What year was an SOP for pre-hospital anaesthesia introduced in your service
 - a. Exact year
 - b. Unknown
 - c. N/A
10. Does your SOP for pre-hospital anaesthesia contain provision for the clinician to choose from more than one induction agent and/or more than one neuromuscular blocking agent?
 - a. Yes
 - b. No
 - c. N/A
11. How was SOP for pre-hospital RSOI itself developed?
 - a. From local consensus opinion and/or a review of the evidence and/or from the extensive experience of pre-hospital RSI's in your service
 - b. Copied from that of another pre-hospital service
 - c. Adapted from that of another pre-hospital service
 - d. Unsure
 - e. N/A

12. Which of the following methods are used in your service to increase operator familiarity with pre-hospital RSI SOP's before allowing them to perform pre-hospital RSI?
 - a. Simulation
 - b. Didactic lecture based training
 - c. Written information provided to clinicians
 - d. No methods used
 - e. N/A

Checklists

13. With regard to the use of a formal written pre-induction checklist in your pre-hospital service, which of the following is true?
 - a. In my service a formal written pre-induction checklist exists and its use is both mandatory and routine
 - b. A written pre-induction checklist exists but its use is not mandatory
 - c. My service does not currently have a formal written pre-induction checklist, (if you answered *my service does not current have a formal written pre-induction checklist*, that is the end of the survey. However, if you answered yes, please go to question 14
14. What year was a formal pre-induction checklist introduced in your service
 - a. Year exact
 - b. Unknown
15. What is the format of your checklist?
 - a. Read-do
 - b. Read-confirm*
16. Does your service use a separate checklist for those patients who are peri-arrest, sometimes referred to as a *crash-induction checklist* and those patients who do not require such an expeditious intubation?
 - a. Yes – a different checklist is used for each of these scenarios
 - b. No – the same checklist is used regardless if the patient is peri-arrest or not
 - c. If a patient is peri-arrest clinicians are not required to utilise a pre-induction checklist
17. How was the checklist itself developed?
 - a. From local consensus opinion and/or a review of the evidence and/or from the experience of multiple RSI's in your service
 - b. Copied from that of another pre-hospital service
 - c. Adapted from that of another pre-hospital service
18. Is compliance with using the pre-induction checklist among clinicians formally audited?
 - a. Compliance with checklist usage is audited on a routine basis
 - b. Compliance with checklist usage is audited infrequently on an ad hoc basis
 - c. Compliance with checklist usage is not audited
19. How often is the content and layout of your pre-induction checklists reviewed and/or revised?
 - a. Frequently
 - b. Infrequently
 - c. Our pre-induction checklists are not reviewed or revised
20. Is feedback sought from clinicians involved directly in delivering pre-hospital RSI with regards to checklist length, content, layout and the logistics of utilisation?
 - a. Feedback is sought from clinicians who perform or are involved in the delivery of pre-hospital RSI and is done routinely and formally
 - b. Feedback is sought from clinicians who perform or are involved in the delivery of pre-hospital RSI but is done informally and/or infrequently
 - c. Feedback is not sought from clinicians who perform or are involved with pre-hospital RSI
21. What training methods do you use to increase operator familiarity with pre-induction checklists before using them in a clinical environment?
 - a. Simulation
 - b. Didactic lecture based training
 - c. Written information provided to clinicians

- d. None
22. How often are the training methods mentioned in question 28 utilised as a way of familiarising clinicians with pre-hospital RSI checklists and SOP's?
- a. Always before a clinician starts work with the service and at regular intervals during their practice and whenever checklists and/or SOP's change?
 - b. Always before a clinician starts work with the service but no on-going training
 - c. Not consistently
 - d. Never
23. Do you ever vary the order in which items to be checked are listed on written pre-induction checklists?
- a. Yes
 - b. No

* *Read-do* refers to a checklist which is designed for one person to complete by performing a task and checking it off from a list. Conversely, a *read-confirm* checklist involves one person reading the checklist out and another confirming, usually verbally, when the task is complete.

B - Methods used to develop SOPs and checklists across high and low volume services.

Service	SOP			Checklist		
	Original	Adapted	Copied	Original	Adapted	Copied
High volume	4 (40%)	4 (40%)	2 (20%)	4 (16%)	5 (20%)	1 (10%)
Low volume	8 (57%)	6 (43%)	0 (0%)	6 (40%)	9 (60%)	0 (0%)
All services	12 (50%)	10 (42%)	2 (8%)	10 (40%)	14 (56%)	1 (4%)

'Original' = developed using local consensus opinion and current supporting evidence

'Adapted' = SOP or checklist adapted from that used by another pre-hospital service

'Copied' = SOP or checklist copied directly from that used by another pre-hospital service

Data presented as frequency (% of that type of service)