A Scottish Emergency Department’s Airway Management Journey – creating standards of practice, maintaining quality, governance and taking downstairs care upstairs.

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Background: traditional management..

Patient needs drug assisted airway management in resuscitation room.

- Applies experience from theatre to resuscitation room.
- Decides which drugs to use.
- Uses individual approach.
- Management becomes exclusive to individual Anaesthetist.
- Successfully manages the airway (usually..)

Emergency Physician

- Has advanced airway skills.
- Recognizes need for advanced airway management as part of patient’s care.
- Calls Anaesthetic team.

Anaesthetist
Resuscitation room advanced airways – who?

Emergency Physicians:
- Good at working in Resuscitation room.
- Experts in the undifferentiated patient – consider multiple factors.
- Have advanced airway skills, but not always routinely practiced.
- Responsibility to a department of patients.

Anaesthetists:
- Experts in airway management.
- Experienced in multiple anaesthetic drugs and the pharmacology.
- Not in resuscitation room as often.
- Used to a controlled theatre environment.

Intensivists:
- Critical care experts – multitude of backgrounds (not always anaesthetists)
- Commitments to ward of critically unwell patients, often only one senior.
- Patient is likely to go to ICU anyway for continued care.

We felt Emergency Physicians should lead in resuscitation room...

Resuscitation Room Rapid Sequence Induction...
Achieving Emergency Physician led RSI..

Multifaceted approach to maintain patient safety and improve quality of care.

- **SOP’s:** Standard operating procedures for ED RSI’s created.
- **Equipment:** Creation of airway trolleys and standardisation of equipment.
- **Inclusivity:** Involvement of other specialities to aid RSI.
- **Training:** Improved training for all Emergency Team.
- **Pharmacology:** Drug standardisation: Fentanyl, Ketamine, Rocuronium.
- **Checklists:** Pause & checklist use prior to airway intervention.
- **Documentation:** RSI documentation created for audit and records.
Results from our journey.

- October 2014 to March 2016
- 122 RSI’s, difficulty predicted in 56%.
- Primary indications - toxirome or head injury
- 73% had Anaesthetic or Intensivist presence.

### Anaesthetist RSI’s:
- 45 (37.5%) patients.
- 1st pass intubation: 97%

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<th>Drugs at induction:</th>
<th>Propofol</th>
<th>Thiopentone</th>
<th>Ketamine</th>
<th>Midazolam</th>
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### Emergency Physician RSI’s:
- 70 (58.4%) patients.
- 1st pass intubation: 93%

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### Intensivist RSI’s:
- 5 (4.1%) patients.
- 1st pass intubation: 80%

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- Intubation success in 99% (x1 surgical airway).
- Overall 1st pass intubation: 91%.
- Complication rate 6% (cuff failure, 2x cardiac arrests, hypotension, IV failure).

- October 2014 to March 2016
- 122 RSI’s, difficulty predicted in 56%.
- Primary indications - toxirome or head injury
- 73% had Anaesthetic or Intensivist presence.
We demonstrated implementation of Emergency Physician led RSI using a multifaceted approach.

- Maintains safety
- Improves documentation
- Maintains quality
- Hospital wide RSI registry with specific documentation and standardisation of airway equipment.

Other clinical areas have adopted a similar approach e.g. ICU.