



# CAN'T INTUBATE CAN'T OXYGENATE – THE ROLE OF THE NURSE

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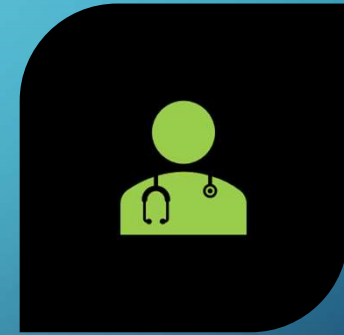
# A RARE OCCURRENCE?



OF AN ESTIMATED 2.9 MILLION  
GENERAL ANAESTHETICS' CARRIED OUT  
IN THE UK – 11 CASES REQUIRED  
FRONT OF NECK ACCESS.



RESULTS IN UNDER-SKILLED STAFF.



HIGHER RISK IN ICU PATIENTS'

(4<sup>TH</sup> NAP 2011)

# ELAINE BROMILEY (2005)



Google images 2019



**NO PLAN** - for failed airway technique.



**COMMUNICATION BREAKDOWN** – no one acknowledged CICO



**HIERACHY** – Nurses were not listened to.

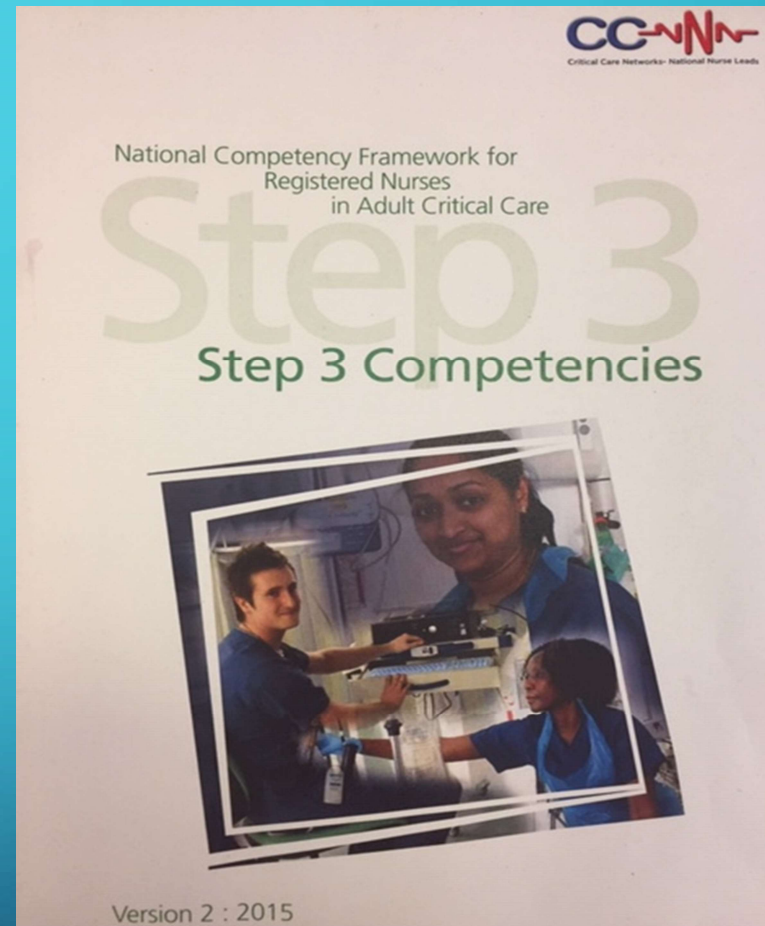
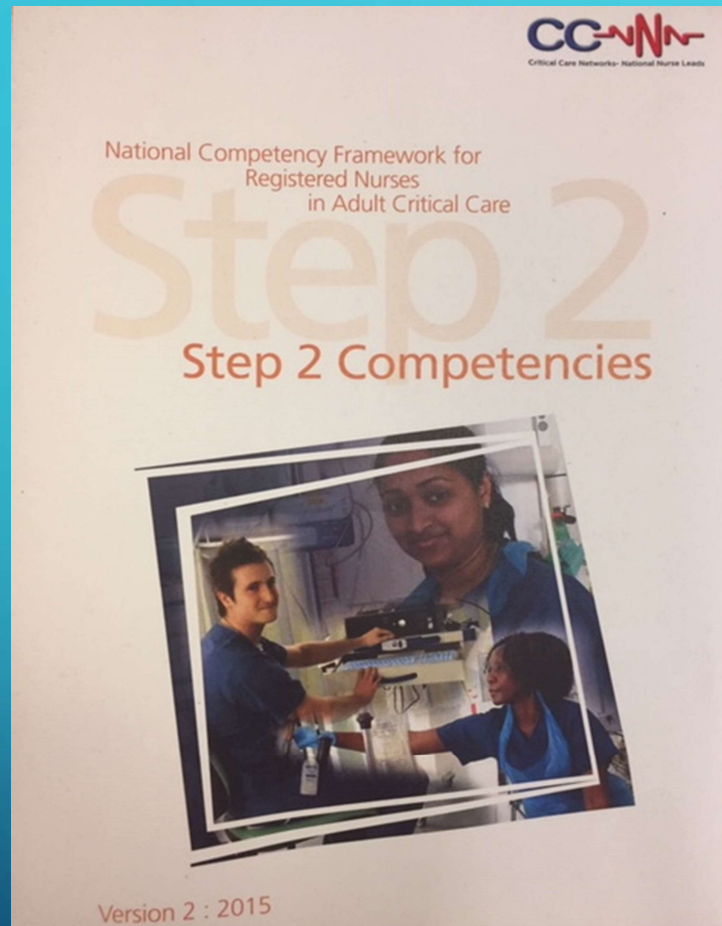


**LOSS OF CONTROL**

Cadogan (2018)

## OUR AIM

- To ensure all ICU nursing staff become familiar with the Can't Intubate Can't Oxygenate algorithm.
- Become familiar with the equipment needed.
- Become more confident to assist the anaesthetist for front of neck access.



CCN (2015)

# DAS Guidelines

- Success depends on Decision Making
- Planning
- Preparation
- Skill acquisition
- Standardising equipment

DAS (2015)





## South West Emergency Airway Training (SWEAT) Course.

- Evolved from Dr Andrew Heard in the 'Wet Lab' Royal Perth Hospital Australia.
- CICO algorithm
- Practical techniques on sheep's trachea and lungs
- Simulation practice

Baker et al (2016)





**Our Method** – ICU Training Days - Adapted and condensed SWEAT course for nursing staff taught by Dr Adam Revill, Sr Wendy Carlton and Sr Lisa Blakeley.

## A Short Scene Setting Video



Just a routine operation/YouTube (2011)

# DAS (2015) Intubation Checklist – Plan D



intensive care  
society  
care when it matters

Intubation Checklist : critically ill adults – to be done with whole team present.

The Faculty of  
Intensive Care Medicine

RCOA  
Royal College of Anaesthetists

## Prepare the patient

- Reliable IV / IO access**
- Optimise position**
  - Sit-up?
  - Mattress hard
- Airway assessment**
  - Identify cricothyroid membrane
  - Awake intubation option?
- Optimal preoxygenation**
  - 3 mins or  $ETCO_2 > 85\%$
  - Consider CPAP / NIV
  - Nasal  $O_2$
- Optimise patient state**
  - Fluid / pressor/ inotrope
  - Aspirate NG tube
  - Delayed sequence induction
- Allergies?**
  - ↑ Potassium risk?  
- avoid suxamethonium

## Prepare the equipment

- Apply monitors**
  - $SpO_2$  / waveform  $ETCO_2$  / ECG / BP
- Check equipment**
  - Tracheal tubes x 2  
- cuffs checked
  - Direct laryngoscopes x 2
  - Videolaryngoscope
  - Bougie / stylet
  - Working suction
  - Supraglottic airways
  - Guedel / nasal airways
  - Flexible scope / Aintree
  - FONA set
- Check drugs**
  - Consider ketamine
  - Relaxant
  - Pressor / inotrope
  - Maintenance sedation

## Prepare the team

- Allocate roles**  
One person may have more than one role.
  - Team Leader
  - 1<sup>st</sup> Intubator
  - 2<sup>nd</sup> Intubator
  - Cricoid force
  - Intubator's assistant
  - Drugs
  - Monitoring patient
  - Runner
  - MILS (if indicated)
  - Who will perform FONA?
- Who do we call for help?**
- Who is noting the time?**

## Prepare for difficulty

- Can we wake the patient if intubation fails?**
- Verbalise "Airway Plan is:"**
  - Plan A:**  
Drugs & laryngoscopy
  - Plan B/C:**  
Supraglottic airway  
Face-mask  
Fibreoptic intubation via supraglottic airway
  - Plan D:**  
FONA  
Scalpel-bougie-tube
- Does anyone have questions or concerns?**

CICO

CANNULAR CRICOTHYROIDOTOMY/  
PACK ONE

SUCCESS

FAILURE

PALPABLE NECK  
ANATOMY

YES

SCALPEL FINGER  
CANNULAR

FAILURE

SCALPEL BOUGIE  
PACK 2

O2 & STABILISE

MELKER AIRWAY

O2 & STABILISE

RAILROAD SIZE 6  
ETT

O2 & STABILISE

MELKER/SELDINGER  
TECHNIQUE

Adapted from DAS Guidelines (2015).



# PRACTICAL TECHNIQUES

Dr A Heard/YouTube (2013)



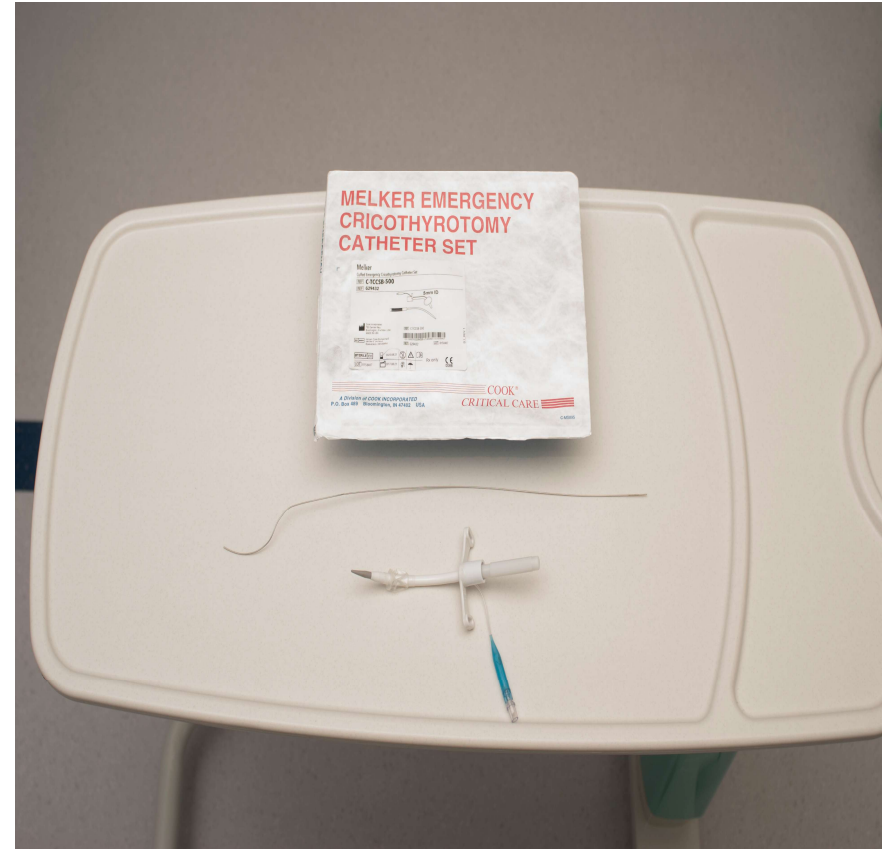




Needle Cricothyroidotomy



Air jet Oxygenation





Scalpel Bougie Technique



## RESULTS

- All but one staff member on our ICU has attended the condensed SWEAT Course.
- The Course received very positive feedback.
- Staff demonstrated advanced knowledge and skill when completing competencies.
- Continued training with simulation and CICO scenarios is necessary to maintain skills.

I feel more confident  
dealing with a CICO  
situation

I have learnt  
new  
knowledge  
and skills

I really enjoyed the  
hands on  
experience

## Conclusion

- Success depends on decision making, a plan of action, preparation and skill acquisition.
- Effective Team Work
- Providing training, reinforced with simulation enables skill acquisition and empowers staff to work effectively within a team helping them to make more efficient decisions, communicate and to take control.



Special thanks to Dr Adam Revill/Super Hero/ICU consultant

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