

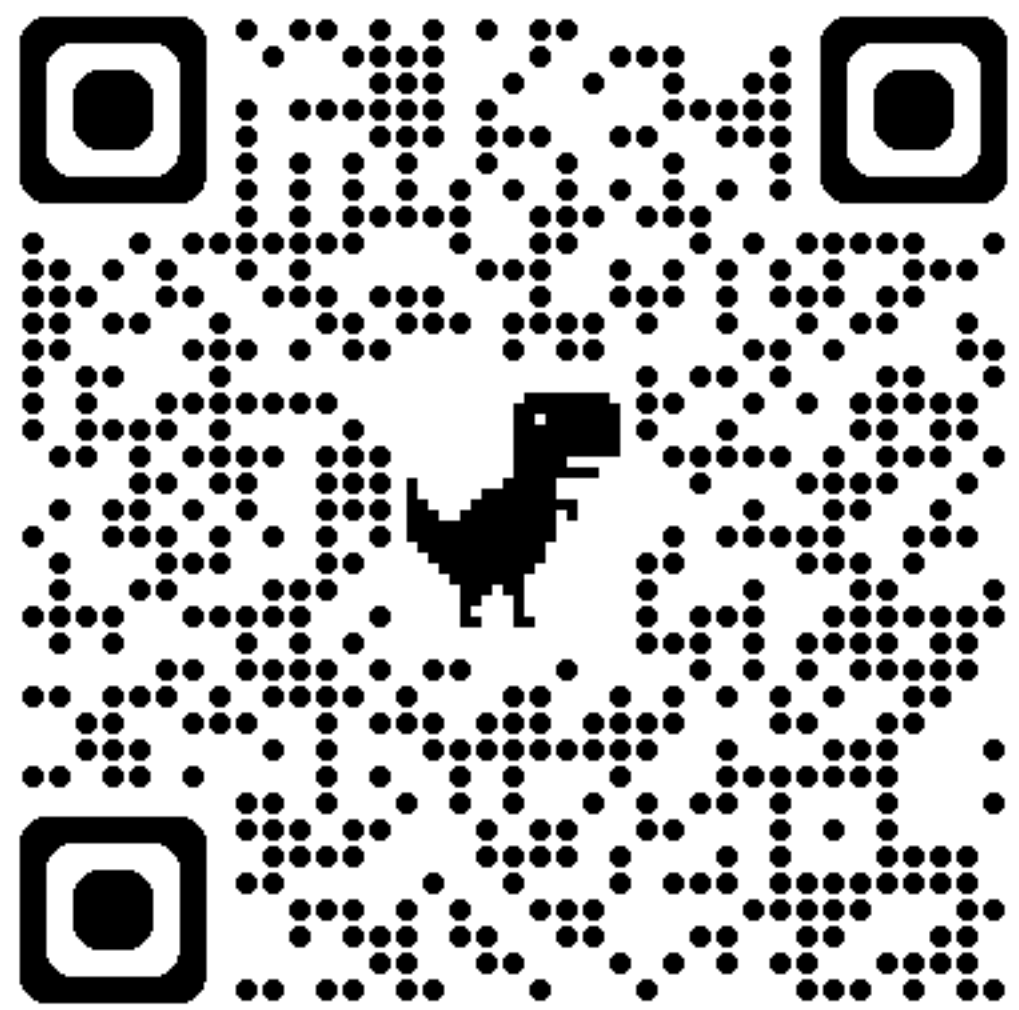


PAEDIATRIC CICO: USING THEIR NECK TO SAVE YOURS

DR. NATALIE MAY

@_NMAY







97%

**WE ARE
END OF THE
ALGORITHM
PEOPLE**

AIRWAY OBSTRUCTED / INACCESSIBLE

INTRALUMINAL

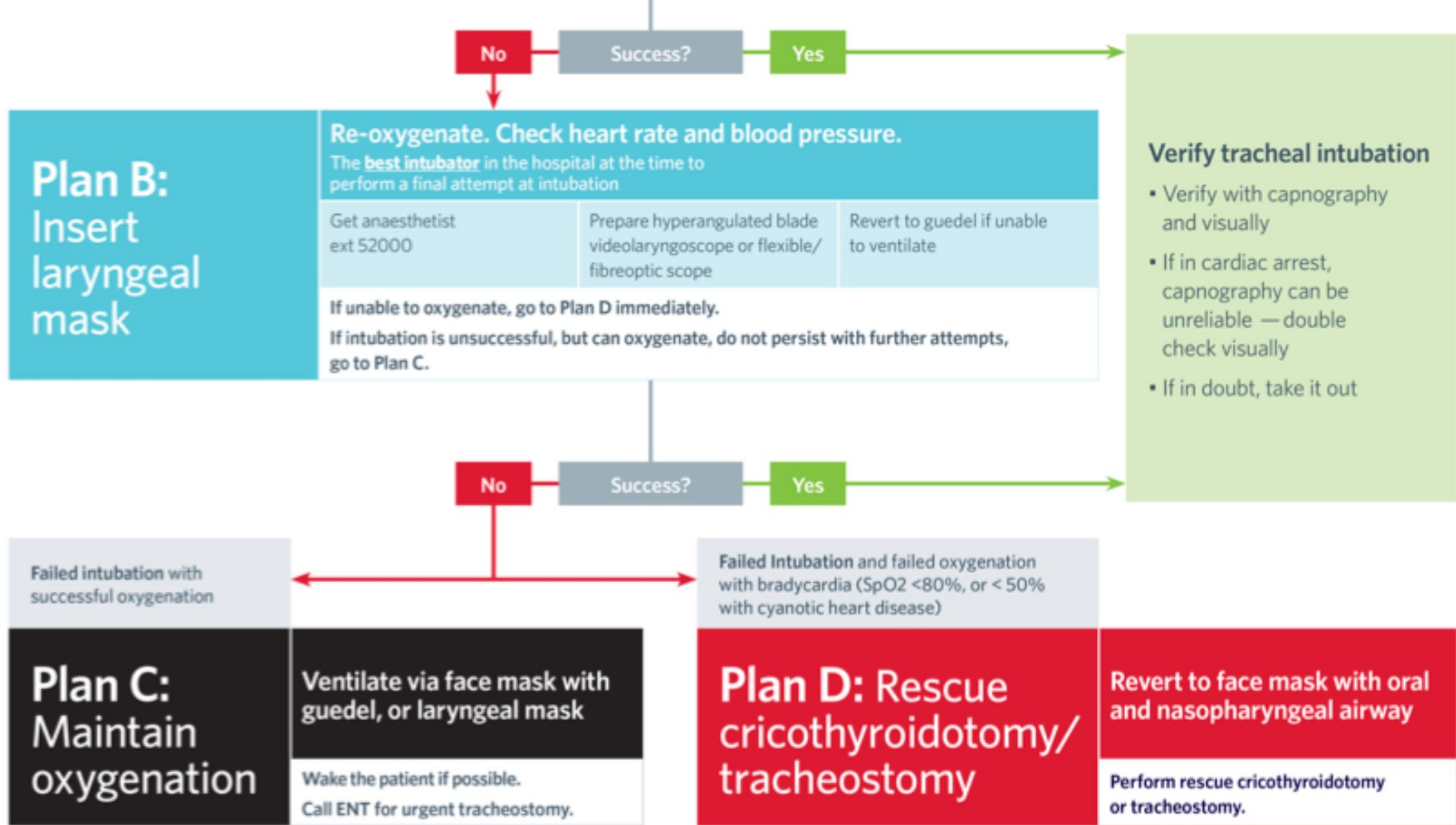
**FOREIGN BODY
BLOOD/VOMITUS
TUMOUR**

EXTRALUMINAL

**HAEMATOMA
TUMOUR**

INTRINSIC

**BURN
ANGIO-OEDEMA
ANAPHYLAXIS
INFECTION**



Failed Intubation and failed oxygenation with bradycardia (SpO₂ <80%, or < 50% with cyanotic heart disease)

Plan D: Rescue cricothyroidotomy/tracheostomy

Revert to face mask with oral and nasopharyngeal airway

Perform rescue cricothyroidotomy or tracheostomy.

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4th National Audit Project of
The Royal College of Anaesthetists and The Difficult Airway Society

Major complications of airway management in the United Kingdom

Report and findings
March 2011

**“THERE WAS A HIGH FAILURE RATE OF EMERGENCY
CANNULA CRICOTHYROIDOTOMY;
APPROXIMATELY 60%.”**



KAL REID



KAL REID



KAL REID



KAL REID

**“IN CONTRAST, A SURGICAL TECHNIQUE FOR
EMERGENCY SURGICAL AIRWAY WAS
ALMOST UNIVERSALLY
SUCCESSFUL.”**

ADULT

TACTILE

FIRM

BIG

UNCOMMON

TRAINING



ADULT

TACTILE

FIRM

BIG

UNCOMMON

TRAINING

ADULT

TACTILE

FIRM

BIG

UNCOMMON

TRAINING

PAEDIATRIC

VISUAL

FLOPPY

SMALL

EXTREMELY RARE

NO TRAINING



RESPIRATION AND THE AIRWAY

Airway management in neonates and infants: European Society of Anaesthesiology and Intensive Care and British Journal of Anaesthesia joint guidelines

Nicola Disma^{1,*}, Takashi Asai², Evelien Cools³, Alexandria Cronin⁴, Thomas Engelhardt⁵, John Fiadjoe⁶, Alexander Fuchs^{1,7}, Annery Garcia-Marcinkiewicz⁸, Walid Habre³, Chloe Heath^{9,10}, Mathias Johansen⁵, Jost Kaufmann^{11,12}, Maren Kleine-Bruegggeny¹³, Pete G. Kovatsis⁶, Peter Kranke¹⁴, Andrea C. Lusardi¹, Clyde Matava¹⁵, James Peyton⁶, Thomas Riva⁷, Carolina S. Romero¹⁶, Britta von Ungern-Sternberg^{10,17,18}, Francis Veyckemans¹⁹, Arash Afshari²⁰, and airway guidelines groups of the European Society of Anaesthesiology and Intensive Care (ESAIC) and the British Journal of Anaesthesia (BJA)

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This article is accompanied by an editorial: From Brobdingnag to Lilliput: Gulliver's travels in airway management guidelines by S. Massimiliano & T. Daniele, *Br J Anaesth* 2024;132: 21–24, doi: 10.1016/j.bja.2023.11.001

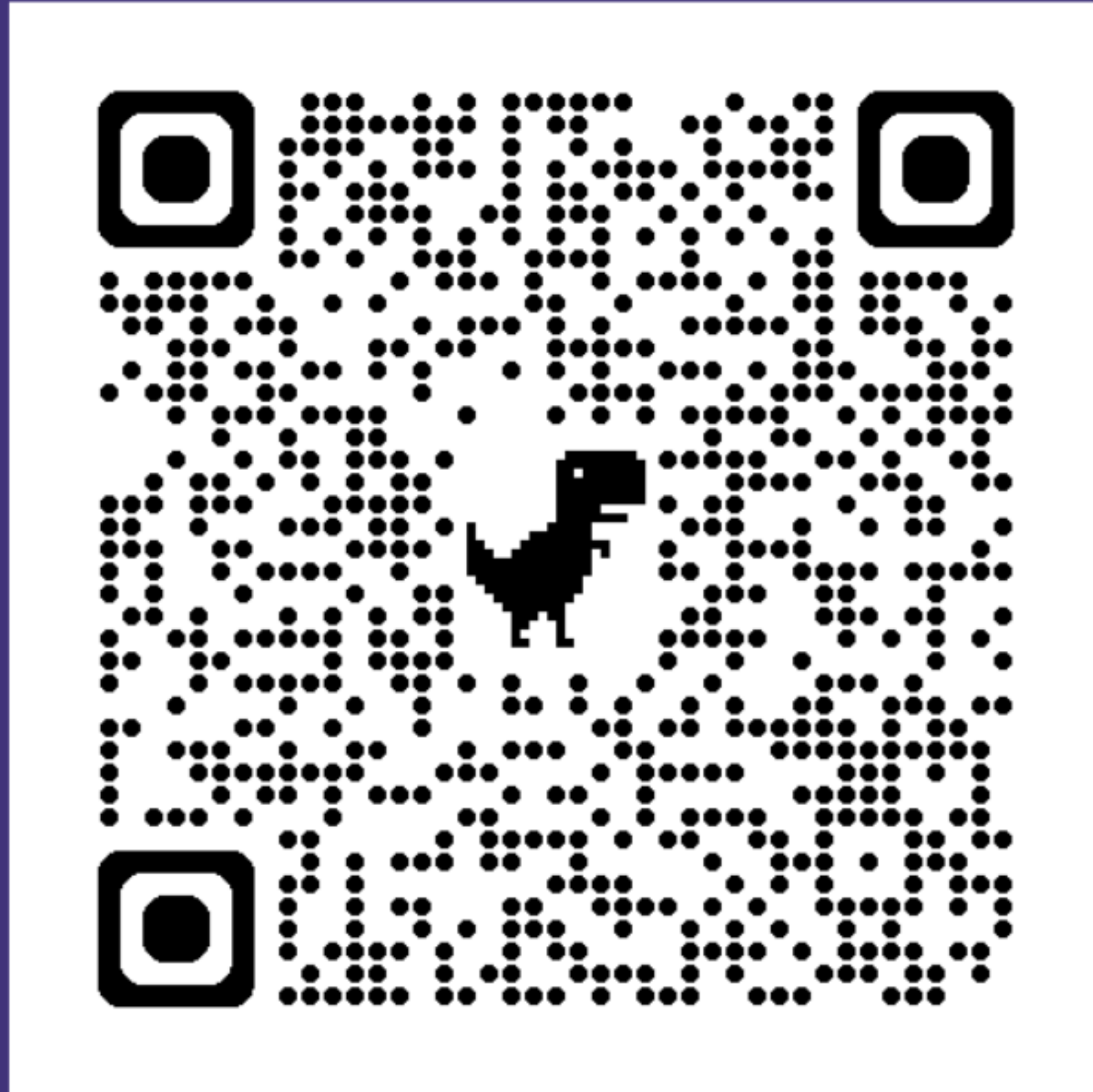


[IN CICO]...



[IN CICO]...

**"A SURGICAL TRACHEOTOMY
SHOULD BE PERFORMED."**



**“SURGICAL CRICOTHYROIDOTOMY
AND PERCUTANEOUS NEEDLE
CRICOTHYROIDOTOMY ARE NOT
SUITABLE OPTIONS IN NEONATES
AND INFANTS.”**







HEMSWORTH

**REMOVABLE/
REPLACEABLE
NECK MODULE**



HEMSWORTH REMOVABLE/ REPLACEABLE NECK MODULE



PLEASE RETURN TO EXECUTIVE AS POSSIBLE

PLEASE RETURN TO EXECUTIVE



PAEDIATRIC SURGICAL AIRWAY



INDICATION: CANNOT OXYGENATE VIA FACEMASK, IGEL, OR TRACHEAL TUBE
USUALLY FOREIGN BODY AIRWAY OBSTRUCTION

>>> GO

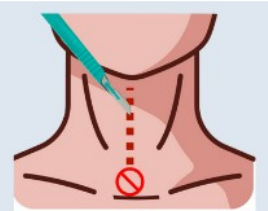


1 POSITION PATIENT - NECK EXTENSION
Avoid hyperextension in infants which may flatten airway

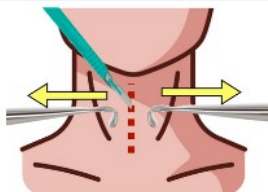
2 IDENTIFY MIDLINE
Marker pen to nose, chin, sternal notch, xiphisternum



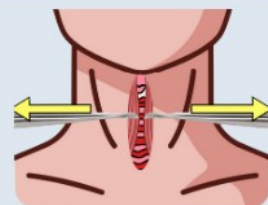
3 VERTICAL SKIN INCISION
Stabilise with non-dominant hand
Avoid lower quarter of neck. Stay in midline



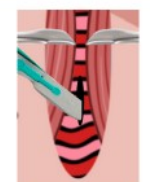
4 ASSISTANT RETRACTS WOUND LATERALLY
Maintain good LIGHT, SUCTION, RETRACTION



5 CUT DOWN TO TRACHEA
Keep retracting lateral structures
to keep strap muscles / vessels away



6 CUT 1-2 ANTERIOR TRACHEAL RINGS VERTICALLY
To allow space for tube



7 INSERT TRACHEAL TUBE
Not too far: cuff just inside. Inflate cuff

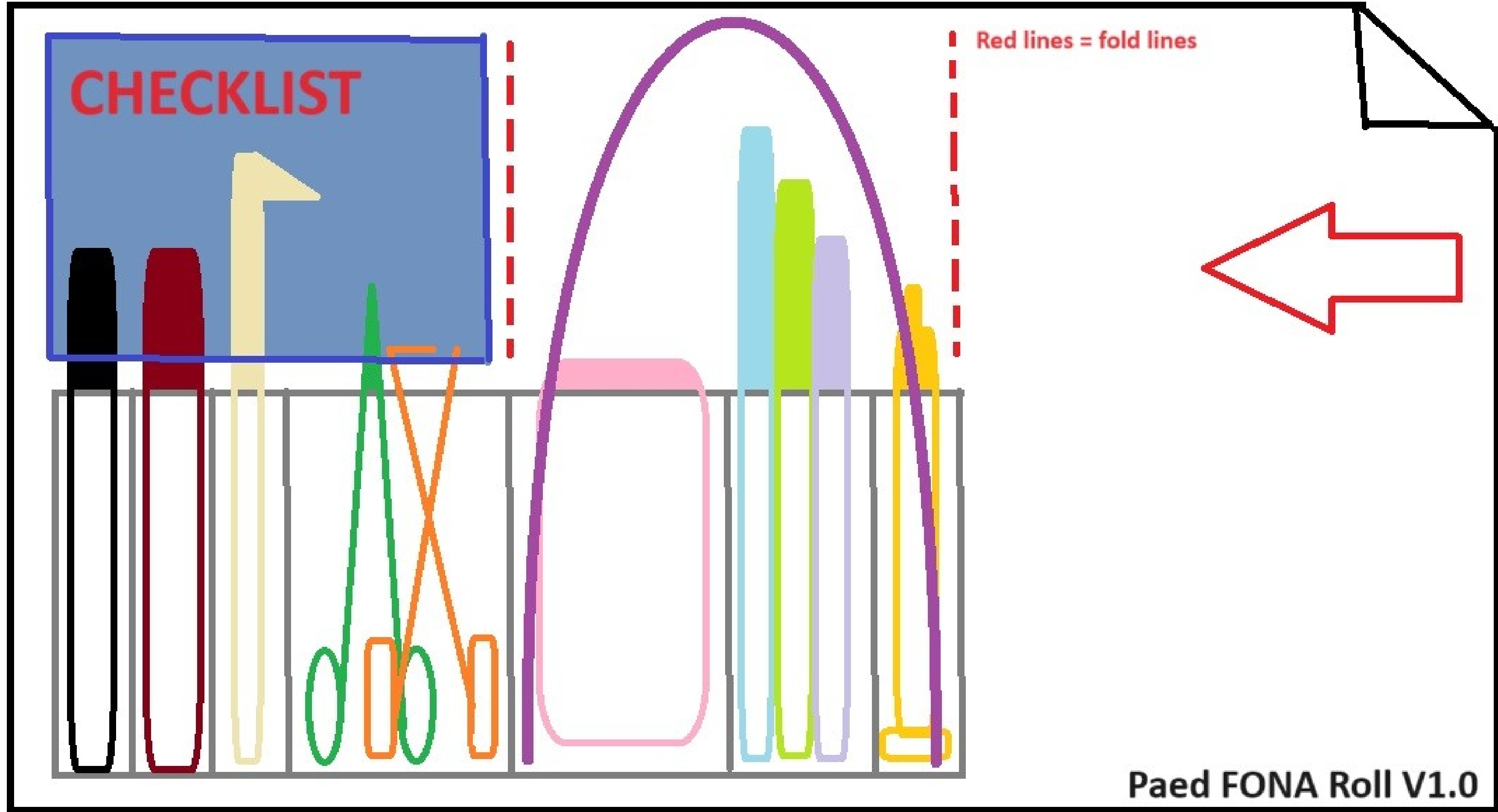


8 VENTILATE & CHECK ETCO₂



9 POST-PROCEDURE CARE

- Ketamine / Rocuronium
- Secure tube - Don't let go!
- Consider Stay Sutures
- Control bleeding with gauze pressure



Marker

Retractors
Scalpel

Iris scissors, claw retractors

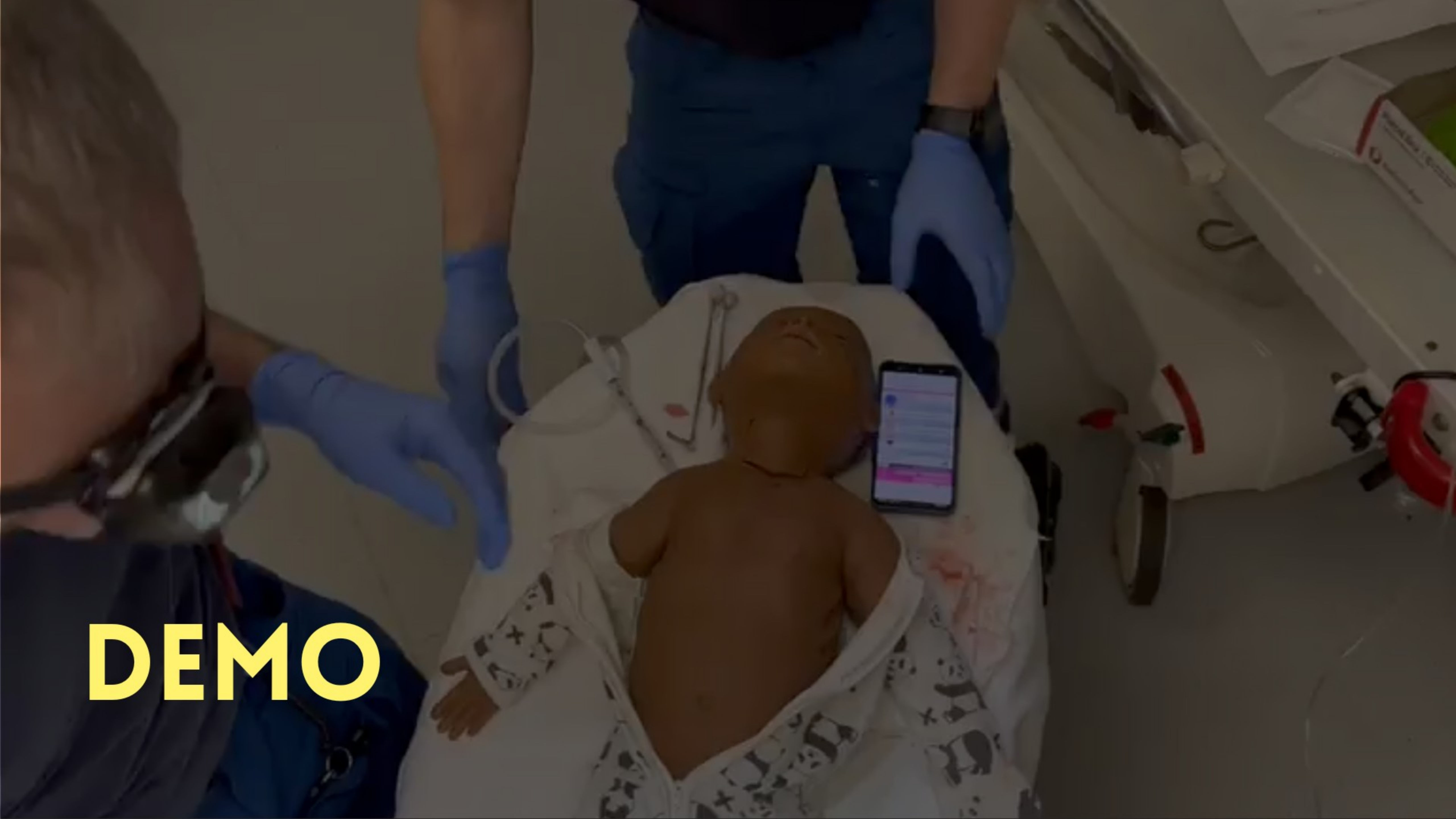
Gauze

Bougie
ETTs

Syringe

Paed FONA Roll V1.0

DEMO





WHAT WILL YOU
DO AT THE
**END OF THE
ALGORITHM?**



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