

# Risk & Paediatric critical care transfer



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NWTS



Regardless of experience, intelligence,  
motivation or vigilance, we all make  
mistakes

# Why is it safer with specialist teams ?

- o Familiarity with age group
- o Familiarity with equipment
- o More experienced
- o Learned from previous 'mistakes'

airway/ETT/airway adjuncts/ Suction - correct size, catheters	Determine all infusions to essential only, before when possible
Always secured Chest X-Ray Check BP position	Baseline observations Document every 5-10 mins (including pupils & PCN drug)
1) ETT tube patent? Always confirm air flow hearing 2) If confirmed ETT use saline lock if flying	Monitoring - SpO2 + ECG, SaO2, BP (non-invasive or arterial) + ETCO2 if ventilated Airway circuit
3) Checked on Transport Ventilator Verify O2 supply (cylinder & ambu-bag) Risk (check) if 60' journey time or more or 2 minutes reserve or 60' journey time in the air	Patient/Equipment secured to stretcher (3-point harness for ETT) Easy access to IV access? Technical team wearing seat belts?
2) Assess a 2 large bore (20G) Assure and patent? (check before leaving) Vaso-OC if necessary +/- AED/ECG, line (assure)	Personnel complete? CPR - BLS/CPR - most staff/observed results Have receiving PCU (before leave)
All below +/- 2-way airway setup & ready to use if needed	Parents updated/comfort number Check they know where their child is going to
Adequate suction & purges - built High/low T-piece to allow Suction catheter?	Transport for parents? Etc for transfer checked
Glucose (BM, glu) checked	Split PCP if air transport
Throat pt - cervical collar & spinal board	21st/22nd/23rd/24th bag

# The referral



Charlie



# The referral

Background history?  
Immediate history?  
Current issues?  
Intubated or not?  
    Oral or nasal?  
    What tube size/length?  
    Grade of view?  
Anaesthetists in attendance?  
Paed Consultant in attendance?  
Maintaining airway?  
Saturation levels?  
Current oxygen delivery?  
Work of breathing?  
Chest X ray?  
Ventilatory pressures?  
Tidal volume?  
Rate?  
Heart rate?  
Heart sounds?  
Blood pressure?  
Invasive or non invasive?  
Capillary refill time?  
Access?  
Peripheral/central or intraosseous?  
Fluid boluses?

Amount of fluid given?  
Type of fluid given?  
Maintenance fluid?  
Inotropes?  
Urine output?  
Palpable liver?  
Palpable femoral pulses?  
GCS / AVPU?  
Sedation?  
PEARL?  
Temperature?  
Blood cultures?  
WBC?  
CRP?  
Other cultures?  
Antimicrobials given?  
Any known resistance?  
Blood gases?  
U & Es?  
Clotting profile?  
FBC?  
LFTs?

What are the difficulties you  
have experienced in a referral  
process ?



# The referral



# Barriers to Effective Communication

- o Human fallibility
- o Complex systems
- o Limitations of learning & training
- o Continuity gaps
- o Negative impact of fatigue
- o Time constraints
- o Volume of information
- o Confidentiality



According to research at Cambridge University, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter be at the right place. The rest can be a total mess and you can still read it without a problem. This is because the human mind does not read every letter by itself, but the word as a whole.

# Stabilisation and transfer



Charlie



- o A - Maintaining own airway
- o B - On CPAP (5) SaO<sub>2</sub> 92%-98% in 40% O<sub>2</sub>
- o C - NIBP 89/56 (66), HR 150-160, Crt <2secs, No Inotropes
- o D - PEARL 3mm R=L no sedation
- o Last Gas (capillary)

**pH 7.38 pCO<sub>2</sub> 6.29 pO<sub>2</sub> 6.0 HCO<sub>3</sub> 28.2 BXS 2.5 Lactate 2.4**

- o Commenced on prostin infusion  
10nanograms/kg/min
- o Mum & Dad would like to travel with Charlie in the ambulance

# TIME TO VOTE



# The Questions

- o This child needs PICU care and transfer now by NWTS*
- o This child needs PICU care and further stabilisation by NWTS before transfer*
- o This child does not need transfer yet*



# Travel Safely

## NWTS Categories

### **Red**

-  Blue lights and sirens

### **Amber**

-  Blue lights and sirens only  
if significant delay

### **Green**

-  Normal traffic rules





# Which transfer category should NWTs use ?

Green



Amber



Red



Does the distance of the transfer alter you decision making ?

YES



NO



# Difficulties *Weather*





Monday, 8  
December 2008  
BBC News

Dangerous: This ambulance overturned in the icy conditions injuring a sick baby inside

The crashed ambulance lies on its side on the motorway

-a four-week old baby was inside when it overturned

-The baby was restrained correctly in the Babypod

-The baby disconnected from ventilator and came out of the Babypod

-Needed Mouth to ET Tube ventilation

-Baby survived





# Secure the Patient

- o 5 point unrestricting harness



# Are you insured?

Yes



Unsure



No



# Difficulties (Capacity)

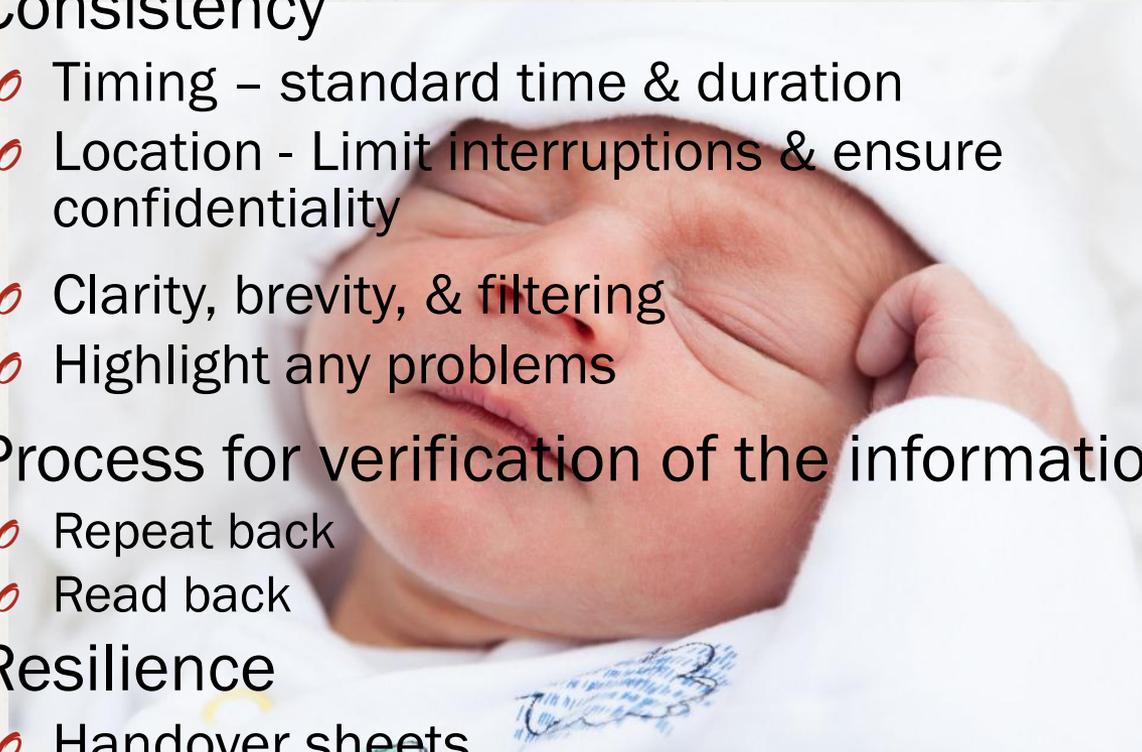


# Handover



# Charlie

- o Leader
- o Consistency
  - o Timing – standard time & duration
  - o Location - Limit interruptions & ensure confidentiality
  - o Clarity, brevity, & filtering
  - o Highlight any problems
- o Process for verification of the information
  - o Repeat back
  - o Read back
- o Resilience
  - o Handover sheets







**We can't change the human condition, but we can change the conditions under which humans work”**  
(J.Reason, 2000)

Thankyou

