

# APLS Course setup for Coordinator June 2024

## Day 1 - Welcome & Aims 1000 - 1030

Plenary Room setup for Welcome & Aims.



Candidates to sit in their coloured groups of 6. Use tables if available. Pink and yellow at the rear as they will leave the room after the plenary.



Faculty to sit at rear of Plenary room for introductions.

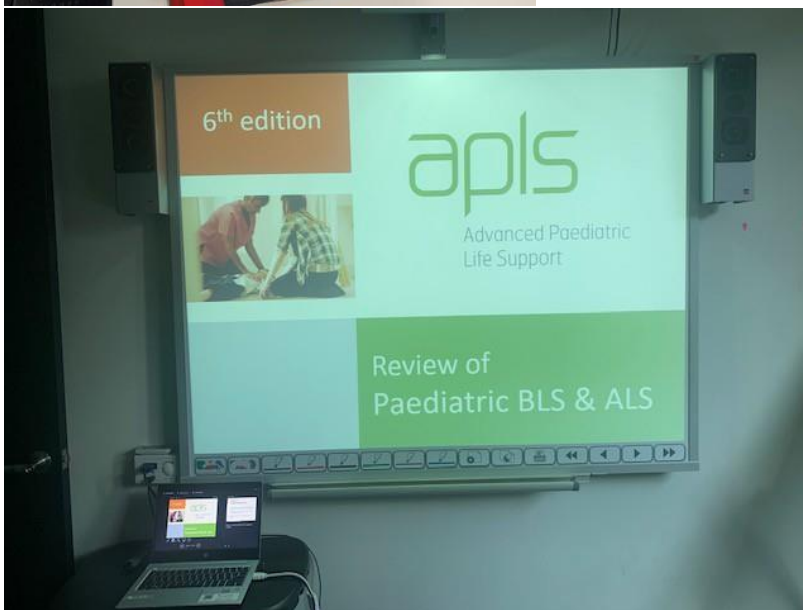


## Day 1 – Interactive Plenary 1030 – 1115

Cardiac Arrest & Advanced Life Support

Equipment. Clipboard and activity pack for each of the 4 coloured groups.

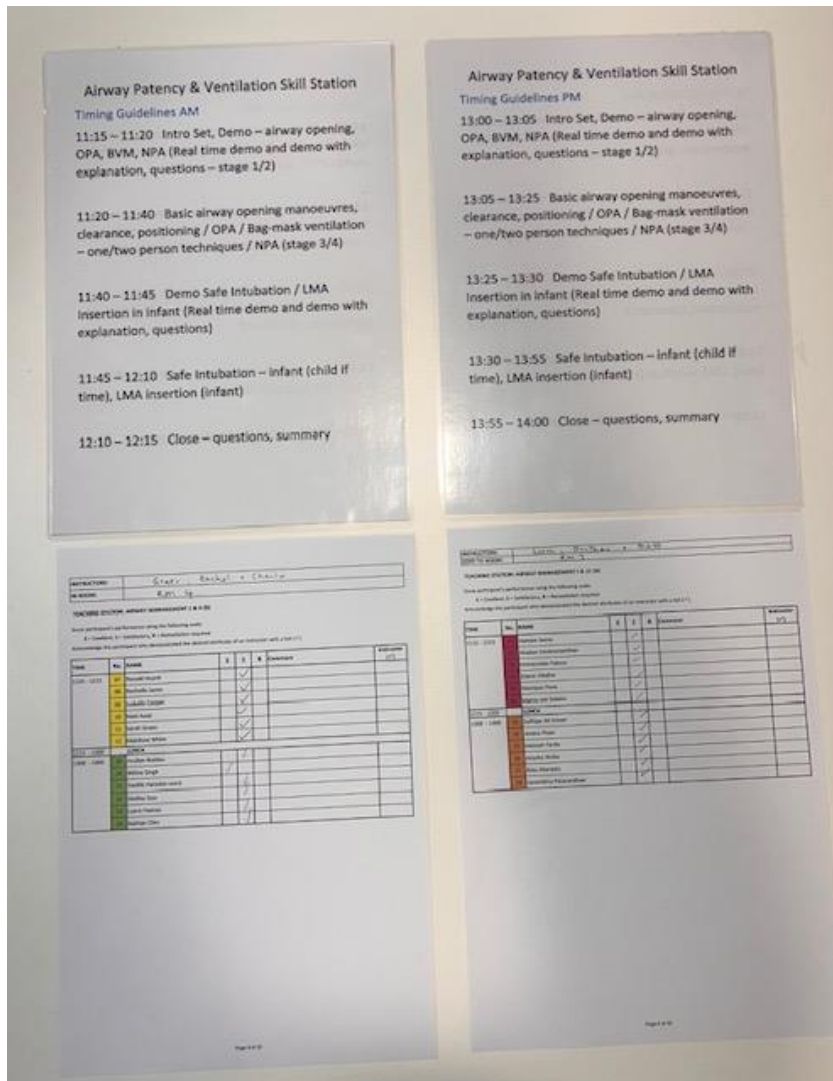
Projector displaying Cardiac Plenary from desktop located on laptop.



# Day 1 – Skill Stations 1115 - 1400

Equipment Setup for Airway Patency & Ventilation skills (2 rooms for skill station A & B)

**Airway Timings Guidelines (1 laminated double sided, 1 for each room) & marking sheet.**







## 2 x Junior ALS Manikins



## 2 x Junior Airway bags (In Box 5)



## Day 1 – Skill Station 1115 - 1400

Equipment Setup for BLS & Choking child

Choking Child St Johns video

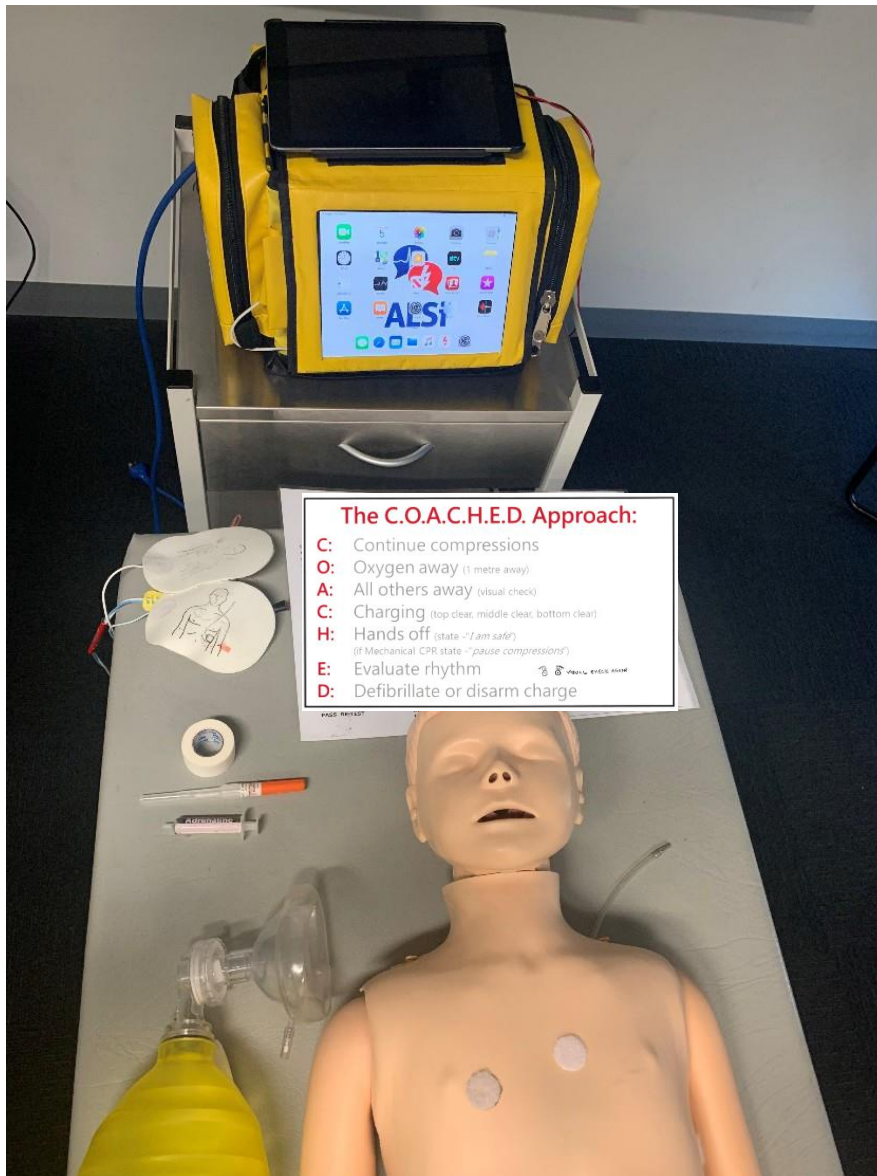


BLS manikin x 3 with small bag for BVM ventilation



## Equipment Setup for Defibrillation & Rhythms skill stations x 3 (Use BLS Junior manikins)

The "COACHED Approach" mnemonic pictured is also included for instructors use.







# Repeated Skills Safe Practice - 1715 - 1745

Each group to go to a room to undertake Repeated Skills Practice. Provide 3 laminates below.

**Repeated Skills Practice**

**SET**

- Welcome to the Repeated Skills Practice Session.
- For the next 40 mins you will have an opportunity to practice the skills you learnt this morning – DRSABC, Airway management, BVM & Defibrillation.
- This is **not** a test.
- We will use a **pause & perfect model** to coach you to achieve safe practice in each skill. We will also **coach you from the side** as needed to ensure you are providing effective BVM & CPR.
- You will be responding to a 10 kg “collapsed” infant and will take on different roles.
- The first responder # 1 starts, and as indicated on the board will respond and complete DRSABC – **complete at least 1 round (minimum)** before others respond.
- Responders 2 & 3 will take on compression roles, responder 4 will take on the defib role and responder 5 will take on role of getting IV access and medications. The 6<sup>th</sup> person can observe and use the Safe Practice Guide to observe for safe practice.
- After 2-3 rounds of shock (minimum of 2 rounds)** we will stop, and everyone will take a clockwise rotation – see the diagram on the whiteboard.
- The process starts again from the beginning.
- There is **no TEAM LEADER** – this is a 10 kg collapsed infant & we would like you to all take appropriate action as assigned.

**Candidate Role 1:** Minimum of two cycles of 15 compressions: 2 breaths before introducing Role 2. Then ask for insertion of oropharyngeal airway to support BVM.

On the white board write up the following before your session starts:

- Name of candidate
- Name of candidate
- Name of candidate
- Name of candidate
- Name of candidate
- Name of candidate

DRSABC  
Compressions  
Compressions  
Defib  
IV Access/meds  
Observer: safety criteria

**Repeated Skills Practice - clockwise rotation**

**Collapsed INFANT** – 10kgs.

If a candidate has been identified as needing more support, assign to Observer Role (6) to observe safe practice.

**Faculty 1** for running the session (Realls)/safe defibrillation.  
**Faculty 2** for coaching BLS, CPA insertion & BVM.  
**Faculty 3** for CPR and noting time, moving roles in a clockwise rotation.

SET – Script for Faculty - Skills repeated practice March 2024

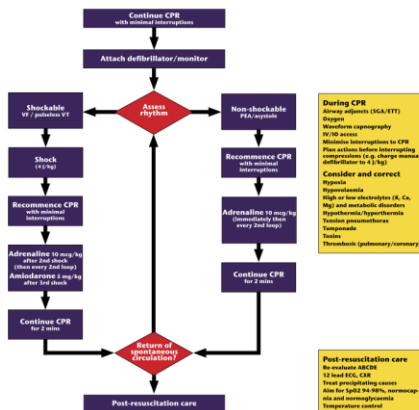
APLS ANZ 6<sup>th</sup> Edition F2F Course Materials

## APLS: Repeated Skills Safe Practice Guide

Collapsed infant – 10 kg

1 <sup>st</sup> RESPONDER	4 <sup>th</sup> RESPONDER
Check for <b>Dangers</b>	Introduce self & ensures CPR is continued.
Assess <b>Responsiveness</b>	<ul style="list-style-type: none"> <li>Applies electrode pads in correct position,</li> <li>Selects energy (4 J/kg)</li> <li>Advises plan for charging</li> </ul>
Send for Help	<b>C – Compressions continue</b>
Open <b>Airway</b>	<b>O – Oxygen away</b> – remove free flowing oxygen
Assess <b>Breathing</b>	<b>A – All others away</b>
Give 2 Breaths ( <b>BVM ventilation</b> )	<b>C – Charge the defib</b>
Check for signs of life	<b>H – Hands off (everyone)</b>
<b>Chest compressions</b> – 15 compressions/2 breaths	<b>E – Evaluate rhythm</b> and ensures rescuers are clear
<b>Effective CPR</b> – 100-120/min, minimal interruptions, Lower half sternum, 1/3 <sup>rd</sup> AP depth	<b>D – Defib</b> - Delivers shock and <b>ensures CPR recommenced immediately after OR disarm</b> if non-shockable rhythm & check pulse
Inserts oropharyngeal airway (OPA)	<b>Following a shock</b> – Continue CPR for 2 minutes
Continues effective <b>BVM</b> ventilation during resuscitation	Advises plan for charging towards the end of the 2 min cycle & <b>follow steps as above</b>
<b>2<sup>nd</sup> and 3<sup>rd</sup> RESPONDER</b>	<b>After 2<sup>nd</sup> shock - Adrenaline IV</b> given 0.1ml/kg of 1:10 000 (10 micrograms/kg initiated by team member/5 <sup>th</sup> responder)
<b>Chest compressions</b> – 15 compressions/2 breaths	Advises plan for charging towards the end of the next 2 min cycle & <b>follow steps as above – ROSC - Disarm</b>
<b>Effective CPR</b> – 100-120/min, minimal interruptions, Lower half sternum, 1/3 <sup>rd</sup> AP depth	

March 2024 Repeated Skills Safe Practice - Guide for Observers



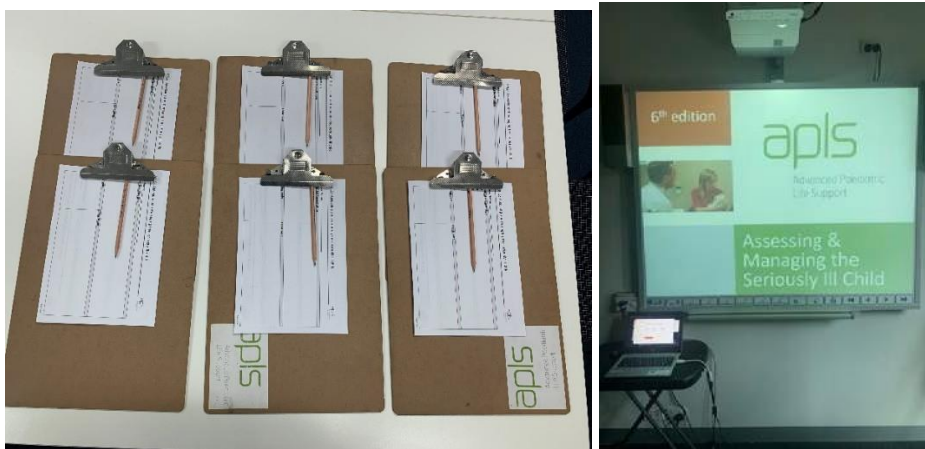
## Day 2: Morning - Interactive Plenary 0800 - 0845

### Structured approach to Serious Illness

Equipment: Clipboard, 2 activity sheets and pencil.

Projector displaying Illness Plenary from desktop located on laptop.

Candidates to sit in 6 groups of 4. (Mixed colours)



## Day 2: Morning - Workshops 0845 - 1100

4 rooms each with 8 chairs set in semicircle around projector screen.

### Pain Management Workshop



## Fluid & Electrolytes Workshop



## Sepsis Workshop



# Transfer & Communication Workshop

## (Provide laminates, paper & whiteboard)



<b>Retrieval – Assessment &amp; Coordination</b>		Pt Name: _____ DOB: _____ Age: _____ Weight: _____ Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female
Call taken by: _____	Date of call: _____	Time: _____
Caller: _____	Accepting MO: _____	
Referring Hospital: _____	Referring MO: _____	
Retrieval Nurse on call: yes / no	Location in referring hospital:	
	Emergency <input type="checkbox"/>	
	ICU <input type="checkbox"/>	
	Operating Theatre <input type="checkbox"/>	
	Ward <input type="checkbox"/>	
	Maternity <input type="checkbox"/>	
	Trauma Wg <input type="checkbox"/> No <input type="checkbox"/>	
	If Yes, has MDT/CT/Trauma Service been notified <input type="checkbox"/>	
<b>SITUATION</b>		
<b>BACKGROUND</b>		
Diagnosis: _____	Infection Precautions: _____	
Immunizations: _____	Allergies: _____	
<b>ASSESSMENT</b>		
Airway: _____	Circulation: _____	
- Patent	- HR	
- BIP/APC/A	- BP	
- ETT	- CRT	
Respiration: _____	Disability: _____	
- RR	- GCS/AVPU	
- SpO2	- Pain	
- WOB	- Pupils	
- NP/HR/IM/BS/ETC	- FIO2	- BSL

Laminates for Transfer & Communication Workshop

**CASE (Only for Referring Team)**

**Setting:**  
Regional ED, 1hr from nearest tertiary hospital

**I Introduction/Identification**  
16 year old (DOB) Boy (Lin Cheung - pedestrian MVA 1 hour ago)

**S Situation**  
Pedestrian MVA by a car 1 hour ago  
Unconscious at scene  
Left sided head injury  
Large contusion over lateral aspect of left thigh

**B Background**  
GCS – 10 on arrival then 8, NO other medical history, MALT, NKA

**A Assessment & Treatment**  
Intubated with size 5.5 cuffed ETT – ventilated TV 100ml, PEEP 3 cm H2O, rate 12, sat 97%  
FIO2 40%  
HR 110/min, BP 110/70, CRT 3 secs  
22G IV cannula left forearm  
0.9% saline at 35 ml/hr  
Midazolam 4 mg/hr + Fentanyl 200 mcg/hr  
Temp 35.7C  
Right pupil 3 mm, Left pupil 6 mm & sluggish  
CT scan: left extradural haematoma

**R Request/recommendations**  
Child now needs transfer for ongoing care in a Paediatric Tertiary Trauma Centre & neurological management.

Laminates for Transfer & Communication Workshop

**LAMINATE 1**

**REFERRING TEAM**

**2 candidates**

Referring team things to consider:

- Most senior clinician available.
- Ensure all information gathered before making the phone call.
- Refer to Retrieval Form to gather all required information.
- What is the most important piece of information to convey in the first few words after your introduction – *what important information will "sell" this patient for retrieval.*
- Use ISBAR –
  - Identify themselves. Who they are and their role.
  - Situation. What has happened, what you have done, what you want.
  - Latest observations including weight.
  - Parents weight - important in organising flight.
- Advice re continued management while you wait.
- Referring doctor clarifies management as per recommendations (close loop communication)

Laminates for Transfer & Communication Workshop

**LAMINATE 2**

**TRANSPORT COORDINATOR AND TRANSPORT DOCTOR**

**2 candidates**

Coordinating team things to consider:

- Need information at start of call to triage urgency eg do they just want advice vs want retrieval ASAP.
- Need to activate transport team/vehicle depending on urgency.
- Get remaining information about the patient.
- Makes decision with referring doctor on where and how.
- Uses Retrieval Form to gather all required information.
- Dials in receiving team to call.
- Transport coordinator informs referring & receiving team of arrangements.

Laminates for Transfer & Communication Workshop

**LAMINATE 3**

**RECEIVING TEAM**

**2 candidates**

Receiving team things to consider:

- Case conference with referring doctor, transport doctor and any necessary accepting doctors or sub-specialists required to discuss further management.
- Recommendations for ongoing management of patient while awaiting transfer.
- Check referring doctor has understood.
- Check with transport coordinator details of logistics.

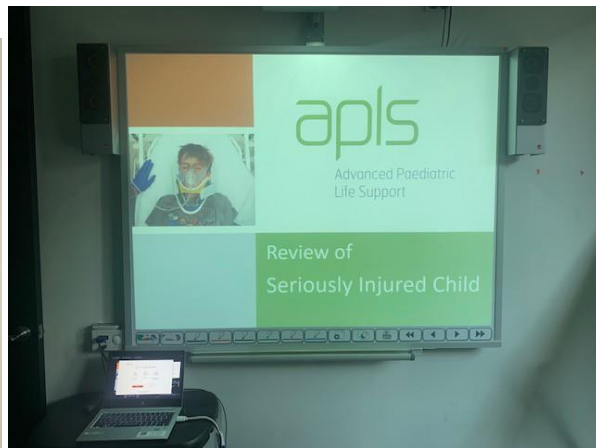
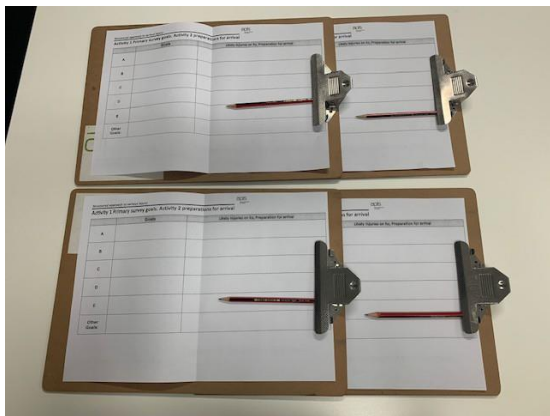
## Day 2: Afternoon - Interactive Plenary 1630 -1730

Structured approach to serious injury

Equipment: Clipboard, 2 activity sheets and pencil.

Projector displaying Trauma Plenary from desktop located on laptop.

Candidates to sit in 4 groups of 6. (Mixed colours





# Day 3 – Emergency Skills Stations 0800 -1050

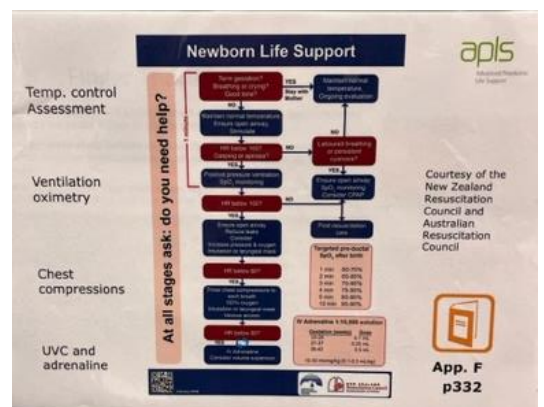
4 rooms – Vascular Access (IO/UVC), Chest procedures, Safe Emergency Airway Management and Radiology.

## Vascular Access

IO x 1 skill station on a table

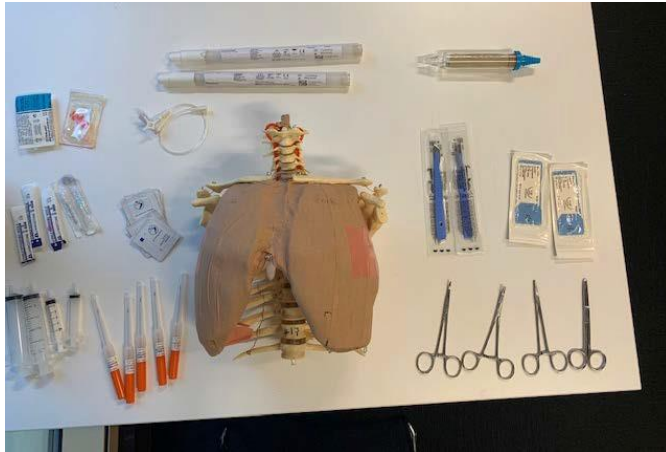


UVC x 3 umbi babies skill stations set up on 1 or 2 tables



# Chest Procedures

Equipment: Set up as pictured x 2 chest skill stations



**Finger Thoracostomy**

- Invasive procedure used to decompress a possible tension pneumothorax urgently (as an alternative to needle thoracostomy)
- Involves rapid sharp incision down to rib, 5<sup>th</sup> or 4<sup>th</sup> IC space, anterior to mid-axillary line, and blunt penetration of the rib space and pleura by a gloved finger
- Withdrawal of the finger then allows rapid release of a tension pneumothorax or on occasion a tension haemothorax

Indications	Contraindications and Considerations
High suspicion of tension haemo/pneumothorax, with critical clinical instability	Used inappropriately in spontaneously breathing patient causes 'open pneumothorax' and may collapse lung
As part of Traumatic Cardiac Arrest (TCA) where tension haemo/pneumothorax may be responsible	Not as management for any pneumothorax, and should always have ICC placed after procedure
For urgent intervention in a deteriorating ventilated patient where tension haemo/pneumothorax may be the cause	Likely more effective in the school age child, and significantly more difficult and less appropriate in infants

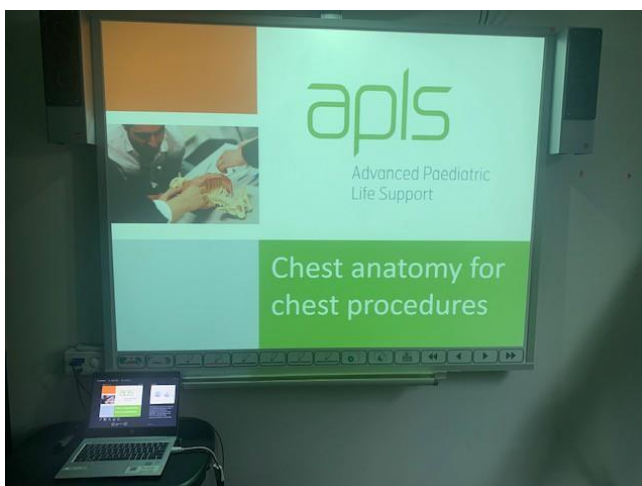
**Intercostal catheters**

Requirements for safe insertion

- Familiarity with the equipment available in your institution
- Developing the skill through training and practice
- Selecting the right patient

Large bore ICC	Small bore ICC
Most common type used in children	Most common catheter used in neonates
Considered more effective in critical trauma - for rapid air and blood evacuation	Should be considered in stable trauma - can drain both air and blood
Open surgical approach	Selfinger technique
More invasive and painful	Less invasive and well tolerated
More scarring	Less scarring

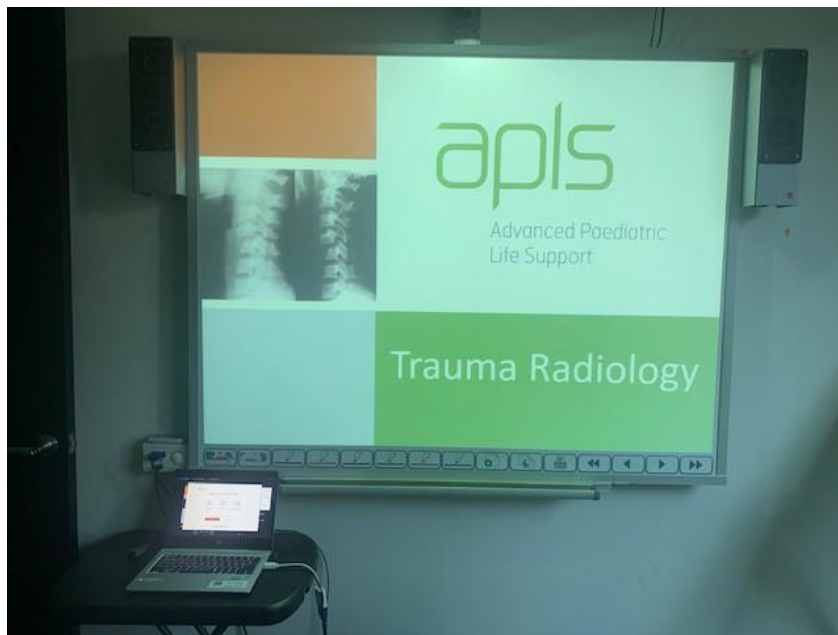
PowerPoint as supporting resource.





## Radiology

**Equipment: PowerPoint presentation projected and 2 slide advancers. 8 chairs in a semicircle around screen. Whiteboard with AAABCS approached displayed.**



AAABCS approach

- Adequacy
- Alignment
- Apparatus
- Bones
- Cartilage and
- Soft tissues

# Day 3 Testing 1410 – 1545 approximately

Label testing sheets with candidates' names.

Provide pencil and eraser and question sheet for 12 candidates to do the T and False test.

Scenario testing sheet on right of image.

