

## **APLS Equipment list 7e**

| Paperwork for faculty meeting |                                                                                                                                                             |                                                                                                                                                                                                                                                                |  |  |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| ΠΑ                            | Faculty should be given access ahead of the course to the documents listed below but the centre should have printed copies available in the faculty room    | <ul> <li>□ Course director checklist</li> <li>□ Instructor guide for 7e APLS</li> <li>□ Global development indicators sheet</li> <li>□ IC or recert instructor pack (1 per IC/recert)</li> <li>□ The learning conversation (a few copies available)</li> </ul> |  |  |
| All                           | In addition, these documents should be available in the simulation rooms                                                                                    | <ul> <li>☐ Global Development Indicators and Specific Assessment Criteria sheet (1 per room)</li> <li>☐ Aide memoire</li> <li>☐ Relevant algorithms</li> </ul>                                                                                                 |  |  |
| Lecture equipment             |                                                                                                                                                             |                                                                                                                                                                                                                                                                |  |  |
| Ψ                             | <ul><li>□ Data projector and computer/lapto</li><li>□ Flipchart and pens</li></ul>                                                                          | op ☐ Relevant PowerPoint presentations                                                                                                                                                                                                                         |  |  |
|                               |                                                                                                                                                             |                                                                                                                                                                                                                                                                |  |  |
| Pre brief                     |                                                                                                                                                             |                                                                                                                                                                                                                                                                |  |  |
| All                           | <ul> <li>□ Pre brief sheet for faculty – 2 per room</li> <li>□ Global Development Indicators and Specific Assessment Criteria sheet – 1 per room</li> </ul> |                                                                                                                                                                                                                                                                |  |  |

ALSG recommends that all centres consider the diversity of their manikins and use a range of skin-coloured manikins on their courses. We also recommend that centres consider the use of adolescent/adult manikins for some of the simulations to aid realism. If time and skills allow, centres might wish to use moulage (makeup etc) in some simulations again to improve realism.

ALSG recommends that APLS centres use technology to aid realism by the use of a system for displaying patient observations that includes SpO<sub>2</sub>/ETCO<sub>2</sub>/BP as well as ECG e.g. using tablets with simulation monitoring such as Sim Mon.

There is a now a simulation where candidates will need to defibrillate a baby manikin – this could be done with a shock block/absorber such as Laerdal 'shocklink'.

It is assumed that the generic simulation equipment will be available in each room; the list below is of additional items that will either need to be available in the sim rooms or that the instructor teams will need to carry with them to the rooms when they are running specific simulations.

| Generic simulation equipment – one set per simulation and sim demo room |                                                      |      |                                                  |
|-------------------------------------------------------------------------|------------------------------------------------------|------|--------------------------------------------------|
| Ma                                                                      | nikins and monitoring                                |      | x 2                                              |
|                                                                         | Junior manikin x 1 (intubatable)                     |      | 24g cannulae x 12                                |
|                                                                         | Baby manikin x 1 (intubatable)                       |      | Small BP scalpel handles x 2                     |
|                                                                         | Adolescent/adult manikin (optional)                  |      | Scalpel blades Size 11 (box) x 1                 |
|                                                                         | Chest manikin to demonstrate/practice on             |      | Tracheostomy tubes 4, 5 & 6 x 1                  |
|                                                                         | Tracheostomy manikin for simulation (baby or         | In a | addition to the one available in the simulation  |
|                                                                         | child) – with spare trachy tube and tapes            | eq   | uipment, a second of each of the following where |
|                                                                         | Monitor-defibrillator with paediatric/adult pads x 1 | x 2  | 2 are required:                                  |
|                                                                         | Heartsim and interface x 1                           |      | Laryngoscope handles x 2                         |
|                                                                         | Electrodes and Paed Monitor Stickers                 |      | Adult curved blade x 2                           |
|                                                                         | ECG Leads                                            |      | Paediatric straight blade x 2                    |
|                                                                         | Tablets with Sim Mon app (recommended)               |      | Nasopharyngeal airways (infant – adult) x 2      |
|                                                                         | Gloves/aprons (if needed)                            |      | Oropharyngeal airways - (infant - adult) x 2     |
|                                                                         |                                                      |      | Oxygen masks with reservoir x 2 (child)          |
| Air                                                                     | way                                                  |      | Oxygen Tubing x 2                                |
|                                                                         | Oropharyngeal airway sizes 000, 00, 0, 1, 2, 3.      |      | Paediatric Magills                               |
|                                                                         | Nasopharyngeal airway (to fit manikins)              |      | Paediatric yankauer suckers x 2                  |
|                                                                         | Endotracheal tube introducers x 2                    |      | Pocket mask adult x 2                            |
|                                                                         | Endotracheal tube fixation material                  |      | Pocket mask child x 2                            |
|                                                                         | Endotracheal Tubes 2.5 uncuffed, 3-                  |      | Self-inflating bags with reservoir and oxygen    |
|                                                                         | 7.5(un)cuffed (in 0.5mm steps);                      |      | tubing: 500 ml x 2; 1500 ml x 2                  |
|                                                                         | End tidal CO <sub>2</sub> monitor                    |      | Soft suction catheters x 2                       |
|                                                                         | Laryngoscope: adult curved blade                     |      | Stethoscopes x 2                                 |
|                                                                         | Laryngoscope: straight paed blades (0 & 1)           |      |                                                  |
|                                                                         | Paediatric Magill Forceps                            |      | rculation                                        |
|                                                                         | Yankauer Sucker (small and large)                    |      | Intravenous cannula 14-25g                       |
| _                                                                       | Soft Suction Catheters (6,8,10)                      |      | EZ-IO drills (or BIG) with paed & adult needles  |
|                                                                         | Oxygen Masks with reservoir (paed and adult)         |      | Intravenous giving sets/IV fluid bags            |
|                                                                         | O <sub>2</sub> tubing                                |      | Syringes: 1ml x 2, 2ml x 4, 5ml x 4,             |
|                                                                         | Bag-valve-mask: 500ml (paed); 1000/1600ml            | _    | 10ml x 4, 20ml x 2, 50ml x 2                     |
| _                                                                       | (adult)                                              |      | Detrostix or BM stix bottle                      |
| _                                                                       | Face Masks circular or anatomical 0/1,1,2,3,4        |      | Temperature probe                                |
|                                                                         | Catheter mounts                                      |      | SpO <sub>2</sub> probe (s)                       |
|                                                                         | Bougee                                               |      | Blanket                                          |
|                                                                         | Stylets                                              |      | Nasogastric Tube(s)                              |
| Ш                                                                       | Laryngeal mask airway or i-Gel sizes (infant-        |      | Pen torch                                        |
| _                                                                       | adult)                                               |      | Tape                                             |
| Ц                                                                       | Lubricant for manikin                                |      | Bandage and splint                               |
|                                                                         | Nasal prongs (infant or child)                       |      | Stethoscope                                      |
|                                                                         | Nebuliser pot                                        |      | BP Cuffs (small and large)                       |
|                                                                         | 3 Way Tap                                            |      | Sharps Bin                                       |
|                                                                         | Y Connector                                          | 1.4  | MINIATES/POSTERS.                                |
|                                                                         | Capnometry                                           |      | MINATES/POSTERS:                                 |
|                                                                         | Intubatable infant & junior manikins or heads        |      | APLS aide memoire                                |
|                                                                         |                                                      |      | see website for algorithms                       |
|                                                                         |                                                      |      |                                                  |

| Illness simulation additional items |                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                               |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Illness<br>demo                     |                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                               |
| Illness 1                           | <ul><li>□ Oral airways</li><li>□ Nasopharyngeal airways to fit manikin</li><li>□ Bag valve mask to fit manikins</li></ul>                                                                                                                                                                                                                                                             | LAMINATES/POSTERS:<br>Coma                                                                                    |
| Illness 2                           |                                                                                                                                                                                                                                                                                                                                                                                       | LAMINATES/POSTERS: Status epilepticus protocol Red flags in child with seizures Emergency Induction checklist |
| Illness 3                           | <ul> <li>□ EZ-IO Driver (or other IO access device), needle sets and bones [Humerus and tibia] x 2</li> <li>□ EZ-Connect extension tubing</li> <li>□ Pressure bag</li> <li>Please note that the bones provided with the trainer can be used for the demonstration and then Crunchie bars wrapped in Elastoplast and frozen can be used to aid multiple candidate practice.</li> </ul> | LAMINATES/POSTERS:<br>Sepsis 6                                                                                |
| Illness 4                           |                                                                                                                                                                                                                                                                                                                                                                                       | LAMINATES/POSTERS:<br>DKA<br>POCUS                                                                            |
| Illness 5                           | ☐ Supraglottic devices (LMA/i-gel)☐ ETT for manikin                                                                                                                                                                                                                                                                                                                                   | LAMINATES/POSTERS: Failed intubation DOPES algorithm                                                          |
| Illness 6                           | □ Nebuliser pot                                                                                                                                                                                                                                                                                                                                                                       | LAMINATES/POSTERS:<br>Anaphylaxis                                                                             |

| Trauma simulation additional items |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                         |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trauma<br>demo                     | ☐ Scoop stretcher ☐ Box/leg splint ☐ Pelvic binder ☐ Head blocks and tape ☐ IV cannulae 18g                                                                                                                                                                                                                    | LAMINATES/POSTERS: P-TRAUMATIC Massive haemorrhage in trauma Blood and fluid therapy in uncontrolled haemorrhage after trauma                                                                                           |
| Trauma 1                           | <ul><li>☐ Cervical collars (for show)</li><li>☐ Head blocks and tape</li></ul>                                                                                                                                                                                                                                 | LAMINATES/POSTERS: P-TRAUMATIC Emergency Induction checklist                                                                                                                                                            |
| Trauma 2                           | <ul><li>☐ Box/leg splint</li><li>☐ Tourniquet</li><li>☐ Kendrick splints</li><li>☐ Triangular bandages</li></ul>                                                                                                                                                                                               | LAMINATES/POSTERS: P-TRAUMATIC Massive haemorrhage in trauma Blood and fluid therapy in uncontrolled haemorrhage after trauma Laminated colour photo of Kendrick splint in situ (optional – see notes in skill station) |
| Trauma 3                           | ☐ Chest manikin for chest drain ☐ Small BP Scalpel Handle ☐ Scalpel blades Size 11 ☐ Scissors ☐ Curved Haemostats ☐ Clamps ☐ Large Hard Suture needles ☐ IV cannulae 18g ☐ Chest drains 24g ☐ Underwater seal x2 ☐ Large waterproof tray ☐ 3-way tap ☐ Seldinger chest drain kit ☐ Gloves (and apron optional) | LAMINATES/POSTERS: P-TRAUMATIC Massive haemorrhage protocol Blood and fluid therapy in uncontrolled haemorrhage after trauma                                                                                            |
| Trauma 4                           |                                                                                                                                                                                                                                                                                                                | LAMINATES/POSTERS: P-TRAUMATIC Massive haemorrhage protocol                                                                                                                                                             |
| Trauma 5                           | <ul><li>□ Pelvic binders (various make/sizes)</li><li>□ Large BP cuff</li></ul>                                                                                                                                                                                                                                | LAMINATES/POSTERS: P-TRAUMATIC Massive haemorrhage protocol Blood and fluid therapy in uncontrolled haemorrhage after trauma                                                                                            |
| Trauma 6                           | <ul><li>☐ Cervical collars (for show)</li><li>☐ Head blocks and tape</li></ul>                                                                                                                                                                                                                                 | LAMINATES/POSTERS: P-TRAUMATIC Spinal dermatomes Spinal imaging and referral                                                                                                                                            |

| Cardiac s   | Cardiac simulation additional items                                                                    |                                        |  |
|-------------|--------------------------------------------------------------------------------------------------------|----------------------------------------|--|
| Cardiac     | ☐ BLS manikin – child                                                                                  | LAMINATES/POSTERS:                     |  |
| demo        | ☐ Monitor-defibrillator with paediatric/adult                                                          | Hyperkalaemia                          |  |
|             | pads x 1                                                                                               | Cardiac arrest                         |  |
|             | ☐ Heartsim and interface x 1                                                                           | Expanded cardiac arrest                |  |
|             | □ Electrodes and Paed Monitor Stickers                                                                 | VF and pulseless VT                    |  |
|             | ☐ ECG Leads                                                                                            | ·                                      |  |
| Cardiac 1   | □ BLS manikin – child                                                                                  | LAMINATES/POSTERS:                     |  |
|             | □ Equipment for Defibrillation                                                                         | Cardiac arrest                         |  |
|             |                                                                                                        | Expanded cardiac arrest                |  |
|             |                                                                                                        | VF and pulseless VT                    |  |
|             |                                                                                                        | Hypothermia                            |  |
| Cardiac 2   | ☐ BLS manikin – child                                                                                  | LAMINATES/POSTERS:                     |  |
|             | ☐ Chest manikin for needle thoracocentesis                                                             | Cardiac arrest                         |  |
|             | ☐ Syringe                                                                                              | Expanded cardiac arrest                |  |
|             | □ IV cannulae 18g                                                                                      | Asystole and PEA                       |  |
|             | ☐ Gloves (and apron optional)                                                                          | FBAO/choking                           |  |
| Cardiac 3   | ☐ BLS manikin – child                                                                                  | LAMINATES/POSTERS:                     |  |
|             | ☐ Equipment for Defibrillation                                                                         | Cardiac arrest                         |  |
|             |                                                                                                        | Expanded cardiac arrest                |  |
| 0 " 1       | T 1 ( 1 1 2 2 1 1 2 2 1 2 2 2 2 2 2 2 2 2                                                              | VF and pulseless VT                    |  |
| Cardiac 4   | Tracheostomy baby manikin for simulation                                                               | LAMINATES/POSTERS:                     |  |
|             | ☐ Other tracheostomies e.g. cuffed                                                                     | DOPES information                      |  |
|             |                                                                                                        | NTSP tracheostomy emergency management |  |
|             | Emergency tracheostomy box containing:                                                                 | Cardiac arrest                         |  |
|             | <ul><li>☐ introducer,</li><li>☐ spare tracheostomy tube (same size),</li></ul>                         | Expanded cardiac arrest                |  |
|             | <ul><li>□ spare tracheostomy tube (same size),</li><li>□ one size smaller tracheostomy tube,</li></ul> | Asystole and PEA                       |  |
|             | ☐ suction catheters,                                                                                   |                                        |  |
|             | ☐ tapes,                                                                                               |                                        |  |
|             | □ scissors                                                                                             |                                        |  |
|             | ☐ lubricant jelly                                                                                      |                                        |  |
|             | ☐ tracheal dilator should be available                                                                 |                                        |  |
| Cardiac 5   | ☐ BLS manikin – infant                                                                                 | LAMINATES/POSTERS:                     |  |
| - Jaraiao o | ☐ Equipment for cardioversion of an infant                                                             | Cardiac arrest                         |  |
|             | mainikin– centres may need to use a                                                                    | Expanded cardiac arrest                |  |
|             | system to 'block the shock' such as Laerdal                                                            | Supraventricular tachycardia           |  |
|             | 'shocklink'                                                                                            | oup a volumou a vaoi i y ou a a        |  |
| Cardiac 6   | ☐ BLS manikin - infant                                                                                 | LAMINATES/POSTERS:                     |  |
|             |                                                                                                        | Cardiac arrest                         |  |
|             |                                                                                                        | Expanded cardiac arrest                |  |
|             |                                                                                                        | Asystole and PEA                       |  |
|             |                                                                                                        | Sepsis 6                               |  |

| Final simulation additional items |                                                                                                                                                                                                                                                                                                                |                                                                                                                              |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Final 1                           | ☐ Nebuliser                                                                                                                                                                                                                                                                                                    | LAMINATES/POSTERS: Asthma Cardiac arrest Expanded cardiac arrest Asystole and PEA                                            |
| Final 2                           |                                                                                                                                                                                                                                                                                                                | LAMINATES/POSTERS:<br>Coma<br>Sepsis 6                                                                                       |
| Final 3                           | □ Chest manikin for chest drain □ Small BP Scalpel Handle □ Scalpel blades Size 11 □ Scissors □ Curved Haemostats □ Clamps □ Large Hard Suture needles □ IV cannulae 18g □ Chest drains 24g □ Underwater seal x2 □ Large waterproof tray □ 3-way tap □ Seldinger chest drain kit □ Gloves (and apron optional) | LAMINATES/POSTERS: P-TRAUMATIC Massive haemorrhage protocol Blood and fluid therapy in uncontrolled haemorrhage after trauma |
| Final 4                           |                                                                                                                                                                                                                                                                                                                | LAMINATES/POSTERS: Cardiac arrest Expanded cardiac arrest Asystole and PEA                                                   |
| Final 5                           |                                                                                                                                                                                                                                                                                                                | LAMINATES/POSTERS:                                                                                                           |
| Final 6                           |                                                                                                                                                                                                                                                                                                                | LAMINATES/POSTERS: P-TRAUMATIC Burns Body surface area in burns Cardiac arrest Expanded cardiac arrest Asystole and PEA      |