CARDIOPULMONARY RESUSCITATION AND EQUIPMENT

PRACTICE GUIDELINE ©

DOCUMENT SUMMARY/KEY POINTS

The phone number for calling the CHW Arrest Team or SCH Code Blue Team is 2222

- On discovering a collapsed or seriously unwell person, use the DRSABCD approach to Basic Life Support, call the Arrest Team for help and start Advanced Life Support when appropriate staff arrive.

CHW

- If you are in a **ward area** - dial 2222 and state "**Send the Arrest Team to …**" and state the ward, level and patient location.
- If you are in a **non-ward area** - dial 2222 and state "**Send the Mobile Arrest Team to …**" and state the patient location and level.

The ward and mobile arrest trolleys all have the necessary equipment for Advanced Life Support management of an arrested patient from a newborn through to an adult.

SCH

- For all areas within SCH and POWH dial 2222 and state "**Code Blue Caller's name, location eg. Building, Ward, Bed number, Adult or Child"**

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1st September 2018	**Review Period**: 3 years
Team Leader:	Patient Safety Project Officer	**Area/Dept**: Clinical Governance

Date of Publishing: 6 February 2019 4:53 PM Date of Printing: 6 February 2019

CHANGE SUMMARY

- Update of practice guideline to be applicable across the Network with site specific information as required
- Removal of educational content which is now located on the SCHN Intranet: Education and Development
- Resuscitation information updated as per the Advanced Paediatric Life Support Guidelines and the Australian Resuscitation Council

READ ACKNOWLEDGEMENT

- All staff should be familiar with the section on Basic Life Support and how to call for help from the Arrest Team.
- All targeted nursing, medical and allied health staff are required to read and acknowledge this practice guideline.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

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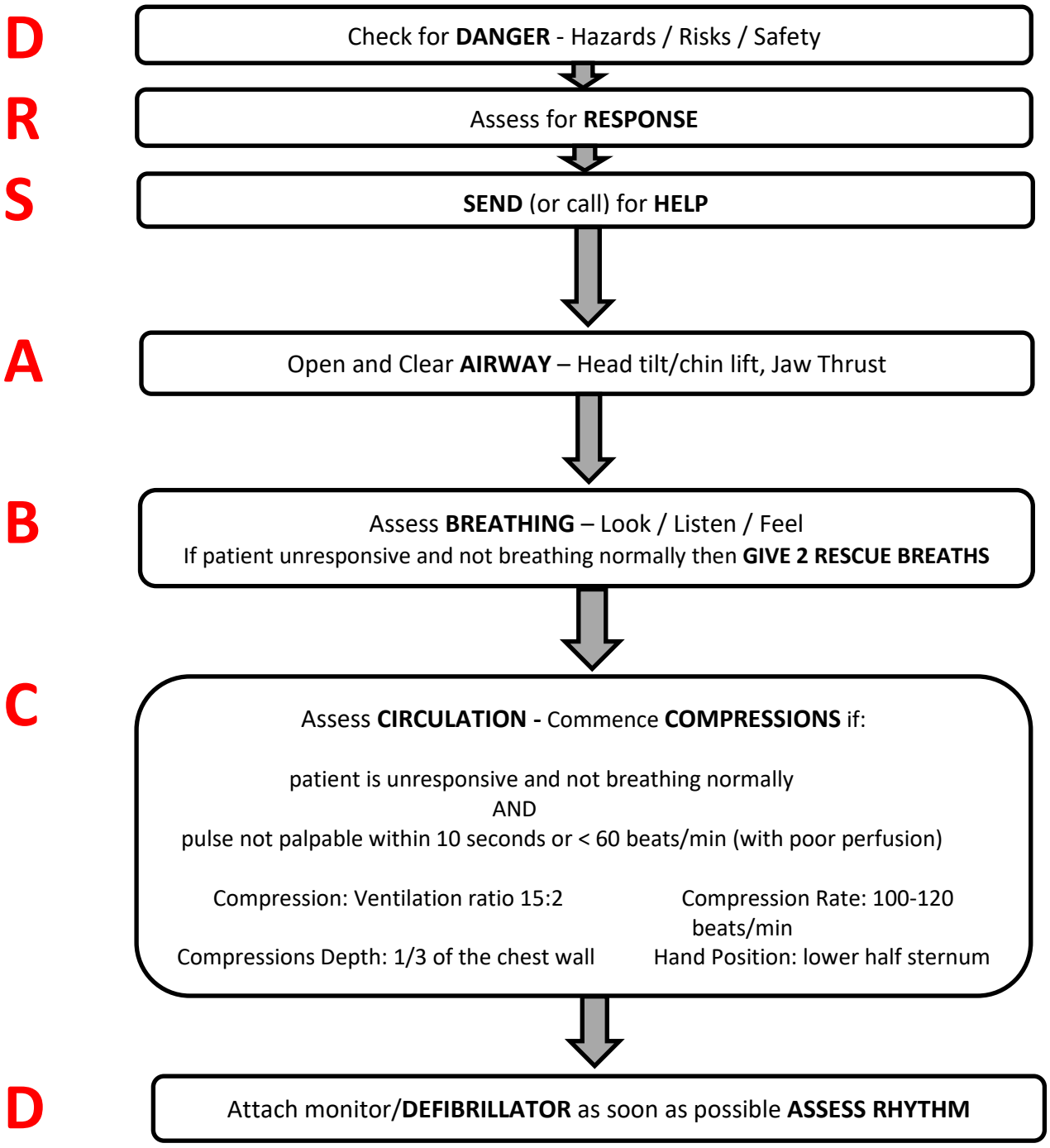
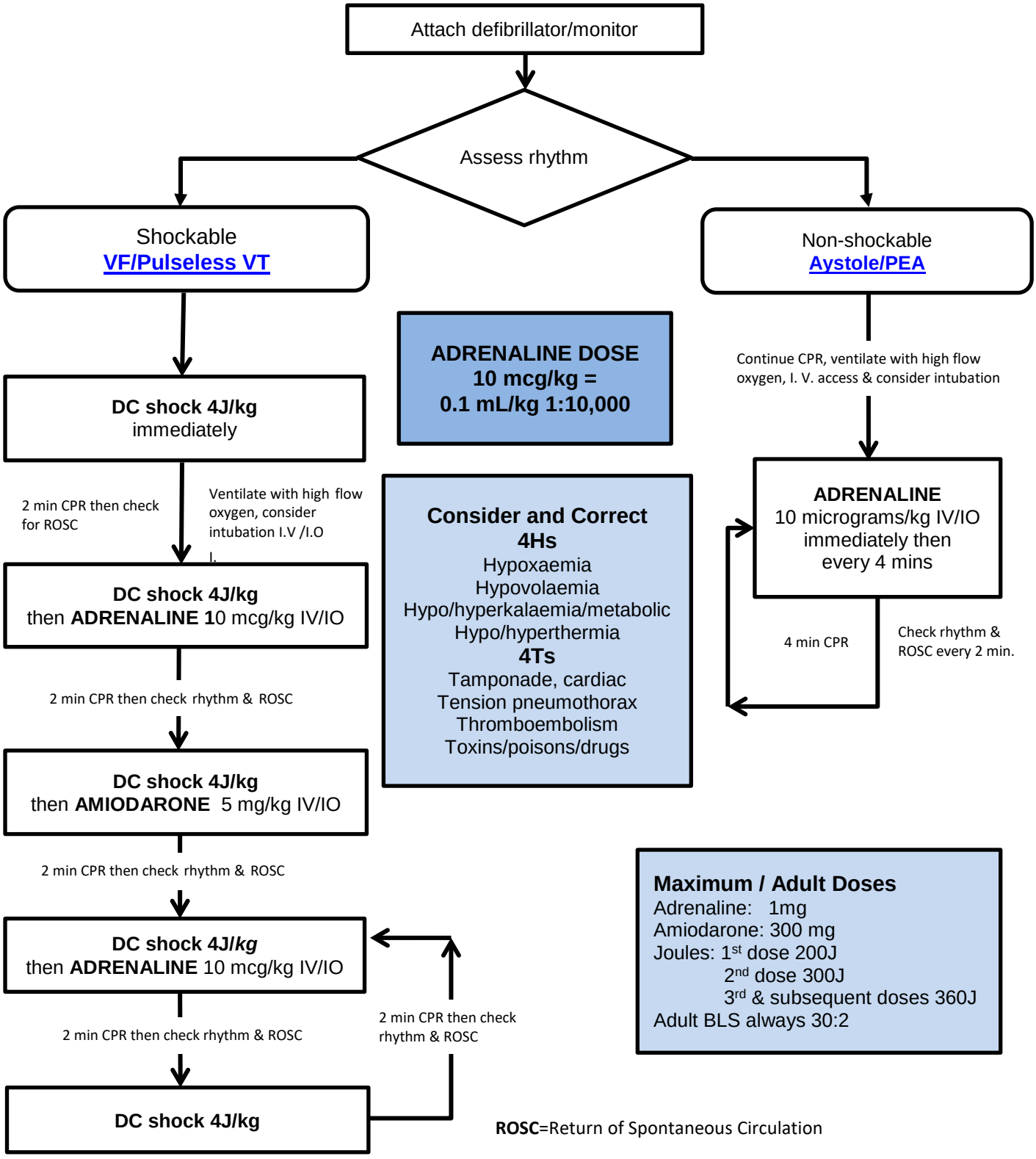
Algorithm A: Basic Life Support

Paediatric Basic Life Support (BLS) for Healthcare Workers



Algorithm B: Paediatric Advanced Life Support

Paediatric Advanced Life Support (ALS) for Healthcare Workers



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1 Cardiopulmonary Resuscitation

In the event of a presumed cardiac arrest, resuscitative measures must be commenced immediately by any nursing and medical staff present. The only exception to this is when the patient's medical records clearly state 'not for resuscitation' usually in the following:

CHW: "Allow a Natural Death" form (See CHW policy "Allow a Natural Death by Limiting the Use of Life-Sustaining Treatment") .

SCH: Resuscitation Plan – Paediatric (See SCHN policy "Resuscitation Plans – End of Life Decisions")

On discovering a collapsed person, commence basic life support (BLS) as per the Paediatric BLS Algorithm above (pages 3 & 4).

1.1 BLS Algorithm Explanatory Notes

D: Danger — *Approach cautiously checking for hazards, risks to your safety. Remember standard precautions e.g. gloves*

R: Responsiveness — *Attempt to get a response from the patient by calling their name or providing tactile stimulus. If there is no response, then*

S: Send (or call) for Help by:

1. Pressing Emergency/Arrest button
   - *On hearing the emergency / arrest call, all available ward nursing and medical staff present should respond.*
   - *The first person to pass the resuscitation trolley should collect it and deliver the trolley to the room. If assistance is slow in arriving, leave the patient briefly to collect the resuscitation trolley and return to the patient to commence basic CPR until assistance arrives*.
2. Dialling the Emergency number to summon the Arrest Team/Code Blue Team

---- CHW ONLY----

If you are in a ward area - dial **2222** and state "Send the Arrest Team to …" and state the ward, level and patient location/bed number.

Except:

Grace Centre for Newborn Care: In the event of a non-neonatal arrest summon a mobile arrest team; dial **2222** and state "Send the Mobile Arrest Team to Grace Neonatal Nursery, level 3, bed x"

Hall Ward: For all arrest calls dial **2222** and state "Send the Mobile Arrest Team to Hall Ward, level 1, bed x"

If you are in a non-ward area - dial **2222** and state "Send the Mobile Arrest Team to …" and state the location and level.

---- SCH ONLY ----

For all areas within SCH and POWH, dial **2222** and state the following:

- Code Blue
- Your name
- Location (e.g.; building, ward and bed number)
- Adult or child

Airway

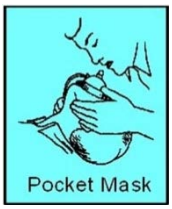
Clear the airway with simple airway manoeuvres (head tilt and chin lift or jaw thrust) and suction the oropharynx as necessary. Consider insertion of an appropriately sized oropharyngeal (Guedel) airway.

Breathing

Check the breathing by looking for chest movement and listening and feeling for breaths from the patient's mouth and nose for 10 seconds.

If the person is breathing spontaneously and effectively, but remains unresponsive, continue to maintain an open airway, apply oxygen and await the arrival of the arrest team/Code Blue Team.

If the patient is not breathing normally, provide 2 rescue breaths. These breaths should be delivered slowly over 1-1.5 seconds each in order to reduce gastric distension.



Note: The Hospital recommends that a self-inflating resuscitation bag be used to ventilate the patient. Mouth-to-mouth/mouth and nose ventilation is not recommended. If a self-inflating resuscitation bag is not immediately available, pocket masks can be obtained in fire hydrant cupboards marked by the symbol opposite at CHW and is contained within the Emergency Packs by the bed and in some Allied Health areas at SCH.

Circulation

Check the pulse for 10 seconds. (The second nurse on the scene should perform this duty). The pulse is best assessed in the following places:

- Infants (<12 months) - femoral or brachial pulse.
- Child/Adult (>12 months) – carotid, femoral or brachial pulse.

If there is an adequate pulse, recheck the breathing and, if spontaneous breathing has not resumed, continue bag-valve-mask ventilation with a self-inflating resuscitation bag connected to high flow oxygen (greater than 14L/min) at a rate of 12 -20 breaths per minute (1 breath every 3-5 seconds)

Start chest compressions if:

- Patient unresponsive and not breathing normally, **AND**
- No palpable central pulse, **OR**

- A slow pulse (< 60 beats per minute with poor perfusion)

Note: For a newborn within 2 hours of birth e.g. baby delivered in the Emergency Department, use compression to ventilation ratio of 3:1 and compression rate of 120/min.

Table 1: Summary of CPR technique

	INFANT	CHILDREN > 1YR	ADULTS
Airway Position	Neutral	Sniffing	Sniffing
Pulse check	Brachial or femoral	Carotid, femoral or brachial	Carotid, femoral or brachial
Chest Compression Landmark	Lower ½ of sternum		
Chest Compression Technique	2 fingers or 2 thumbs encircling	1 or 2 hands	2 hands
Chest Compression Depth	1/3 chest depth		
Chest Compression Rate	100-120/min		
Compression to Ventilation Ratio	15:2	15:2	30:2

1.2 Paediatric Advanced Life Support Algorithms

The following algorithms are available via the Advanced Paediatric Life Support (APLS) Webpage:

- Paediatric Basic Life Support algorithm
- Choking Child algorithm
- Cardiac Arrest Management algorithm
- Paediatric Advanced Life Support algorithm
- Anaphylaxis algorithm
- Bradycardia algorithm
- SVT algorithm
- VT algorithm
- Decreased Conscious Level algorithm
- Status Epilepticus algorithm
- Cervical Spine Management algorithm
- Dehydration algorithm
- Hyperkalaemia algorithm

- ARC / NZRC Newborn Life Support algorithm

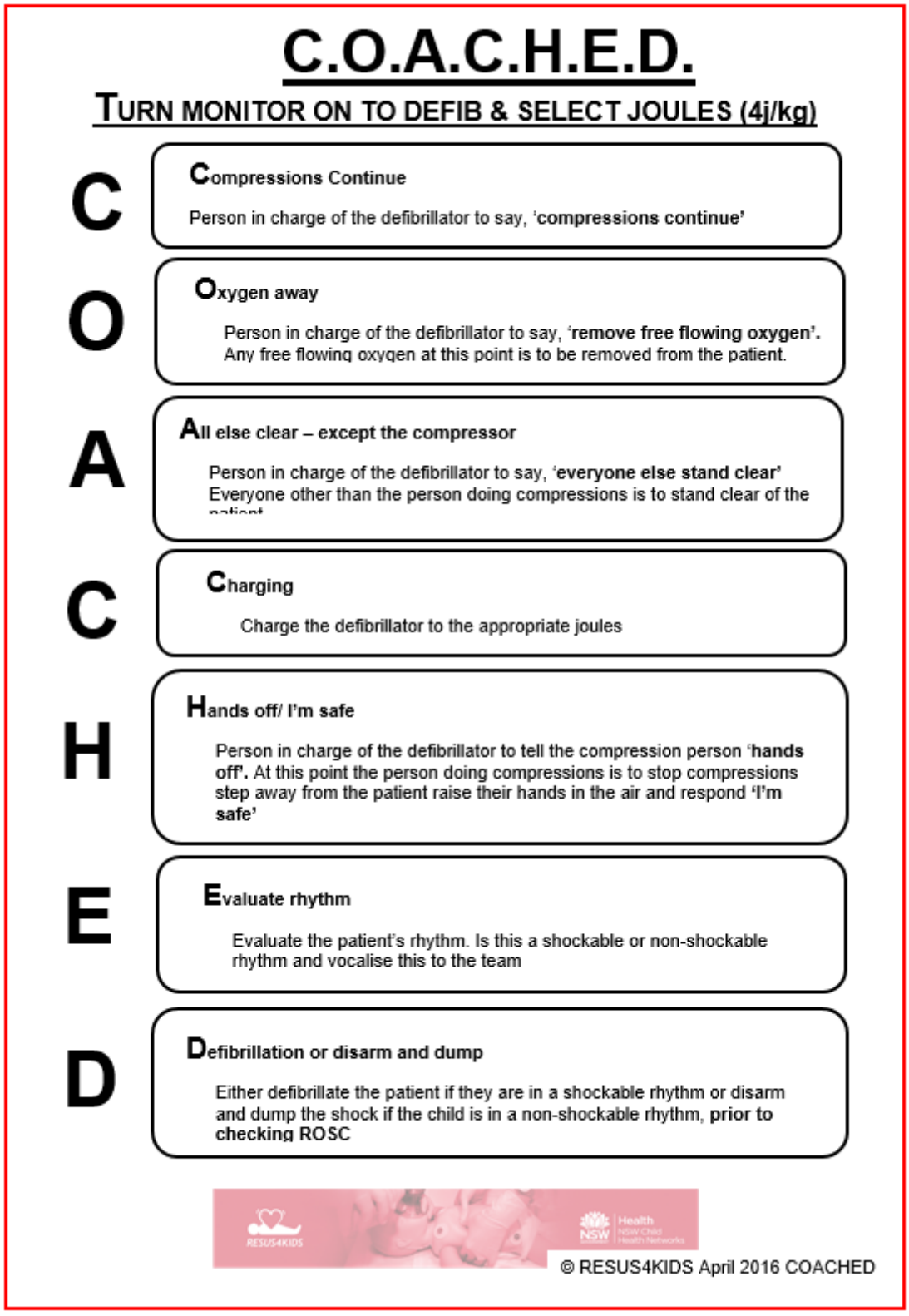
1.2.1 APLS App

The official APLS Australia app is available to download for all iPhone® and Android® phones and can be access free of charge at iTunes® or Google Play®.

Use the search term ‘APLS’.

1.3 Defibrillation

1.3.1 COACHED approach to defibrillation



1.3.2 Defibrillation Doses for children

Rhythm	Mode	1st dose	2nd & all subsequent doses
VF, Pulseless VT	asynchronous	4 J/kg	4 J/kg
VT with pulse or SVT	synchronous	1 J/kg	2 J/kg

1.3.3 Defibrillation Doses for Adults

Rhythm	Mode	1st dose	2nd Dose	3rd Dose
VF, Pulseless VT	asynchronous	200J	300J	360J
VT with pulse	synchronous	100	200J	300J (4th and all subsequent doses up to maximum of 360J)
SVT	synchronous	50J	100J	150J

*** Use the above adult doses as maximum paediatric doses**

1.4 Cessation of Resuscitation

Cardiac arrest in children has a particularly poor outcome. In the ICU, because of the rapidity of intervention, some children who in other settings may have died, may be successfully resuscitated. The decision to stop resuscitation is based on a number of variables including the pre-arrest state, response to resuscitation, reversible factors, patient and parental wishes, likely outcome and opinions of experienced staff. In the ICU, the attending intensivist is responsible for the decision to terminate resuscitation and should always be consulted before resuscitative attempts are abandoned.

2 Ward Arrest/Code Blue Calls

2.1 Roles *before* the Arrest/Code Blue Team Arrives

- On hearing the emergency/arrest call all ward staff should respond.
- The first person to pass the resuscitation trolley should collect it and bring to room
- A limited supply of bedside emergency equipment is kept at the patient bedside in all general wards. The equipment is located in the left hand drawer of the bedside locker directly below the wall oxygen outlet or at the back of the bedspace in box attached to the wall. Equipment has been standardised to support the commencement of basic life support until additional resources are obtained.

Bedside Emergency Equipment	
Pocket Mask (SCH ONLY)	x1
Non rebreather oxygen mask – child and adult	x1 each
Oxygen Tubing	x1
Suction Catheters – FG 8,10, 12	x1 each
Yankauer sucker	x1
Short size 12 suction Catheter	X1
Non-Sterile Gloves (singles)	x1
Gauze/Combine	X 2

- First responder on scene - assess patient responsiveness, press emergency / arrest button, assess airway and breathing and commence bag-valve-mask ventilation if required.
- Second responder on scene – Call, or assign an assistant to call the emergency number to activate the arrest team. Then assess circulation and commence external cardiac massage if required
- Third responder on scene - Collects defibrillator from nearest defibrillator location (as indicated on chart behind resuscitation trolley) (see Appendix 2). Ensures all monitoring is connected (ECG, SaO_2 and BP).

2.2 Ward Arrest /Code Blue Team Members & Roles

- If Ward Arrest/Code Blue team members are unavailable, it is their responsibility to ensure they have arranged appropriate cover should an arrest be called.
- All team members must report to the Ward Arrest/Code Blue Team Leader when arriving at the arrest.

Table 2: A guide to Members and Roles

Ward Arrest/Code Blue Team Member	Roles
Medical Registrar: Arrest Team Leader (The ICU Registrar may be the team leader)	• Assume primary responsibility for resuscitation & direction of all individual personnel • Co-ordinate resuscitation efforts: Airway, Breathing, Circulation, Disability (CNS) • Liaise with Attending Medical Officer and team • Co-ordinate disposition of patient • Ensure completion of documentation on arrest form • On night shift the Advanced Trainee Medical/Senior on Site (SOS) Registrar will assume the team leader role and delegate tasks to the Medical Registrar
ICU Registrar: Circulation Doctor	• Obtain IV access & blood specimens • Responsible for fluid administration • Monitor ECG and cardiac output • Push bolus medications during arrest sequence • Liaise with ICU to organise disposition of patient
Anaesthetic Registrar: Airway/ Breathing Doctor	• Airway management • Ventilation • Monitor CNS status • Accompany patient to final disposition if ventilated
Medical Resident	• Obtain history & other information from clinical notes & attending staff & family • Assist with vascular access, blood sampling and documentation as designated
ICU Nurse	• Bring arrest drug pack from ICU (CHW Only) • Bring the EZI-IO (SCH Only) • Responsible for co-ordinating and overseeing nursing management of the resuscitation • Accompany patient during transport to final disposition
Senior Nurse Manager	• Reallocate nursing staff to ensure nursing care of patient throughout resuscitation & relocation • Provide communication link between resuscitation scene and rest of hospital • Maintain resuscitation nursing team to established number and roles. • Arranges ambulance transfer to Westmead hospital for adult arrests as required.

	• Designate nursing staff to accompany patient to receiving unit • In absence of Social Work staff performs functions described for Social Worker below. • Ensures documentation is completed and forwarded appropriately. • Ensures maintenance of patient privacy.
Social Worker	• Assist family to a designated area • Counsel & support family throughout resuscitation • Ensure follow-up dependent on outcome of resuscitation
Nursing Roles	
Nurse 1: Nurse Team Leader (TL) of the ward	• Handover to arrest team leader (may be done by nurse looking after patient) • In consultation with PICU nurse allocate nurses to primary roles of airway, circulation & scribe • Coordinate additional resources as required e.g. equipment, runner & personnel at local level • Maintain safe environment for patients/families/staff in consultation with Senior Nurse Manager • Ensure Resuscitation Trolley is restocked after the arrest (see Appendix 1)
Nurse 2 : Airway Nurse (Often attended by ICU Nurse)	• Assemble necessary equipment for airway management from resuscitation trolley • Prepare suction & high flow oxygen • Ensure scribe is informed of ETT size, location & length at lips
Nurse 3: Circulation Nurse (may require 2-3 nurses)	• Assist with chest compressions if required • Arrange for "Resus Drug Calculator" to be printed from intranet based on patient's weight • Set up for IV cannulation/IO access • Prepare & label drugs for intubation & resuscitation as directed, with a 2nd RN check
Nurse 4: Scribe	• Document all drugs & fluids administered, observations, interventions • Do not leave the foot of the bed to do other procedures unless instructed by TL

2.3 Mobile Arrests/Code Blue Call in non-ward areas

---- CHW ONLY----

If you are in a non-ward area - dial 2222 and state:

"Send the Mobile Arrest Team to …" and state the patient location and level (e.g.: "*Send the mobile arrest team to the Bear Brasserie on level 2*").

This arrest page should be put out for all arrests, adult or paediatric, which occur in a non-ward area.

- One staff member should be sent out to the nearest communal area to direct the team to the site of the arrest.

If there is no immediate assistance available, leave the patient briefly to summon help and then proceed as per the BLS algorithm.

- The Mobile Arrest Pack will be brought to the scene by the ED nurse. The Mobile Arrest Pack contains the same equipment as the ward resuscitation trolleys, with the addition of a Lifepak 20 defibrillator. (See Appendix 1)

---- SCH ONLY ----

For all areas within SCH and POWH, dial **2222** and state the following:

-Code Blue

- Your name

- Location (eg; building, ward and bed number)
- Adult or child

- One staff member should be sent out to the nearest communal area to direct the team to the site of the arrest.

If there is no immediate assistance available, leave the patient briefly to summon help and then proceed as per the BLS algorithm.

- The Code Blue Team will bring the mobile arrest trolley which contains the same equipment as the ward resuscitations trolleys, with the addition of a Zoll defribrilator.

- For **SCH Code Blue Team** Members please refer to Appendix 3. Note: A full complement of nursing staff may not be available in a non-ward area. Additional staff may be deployed if required from other areas such as ICU and ED to assist until the patient can be transferred to a ward environment. The Nurse Manager/After-hours Nurse Manager will help facilitate this.
- **CHW Mobile Arrest Team** Members and Roles please refer to Appendix 3.

2.4 Disposition following Arrest /Code Blue

2.4.1 Children

- **Inpatient:** may be appropriate to remain on the ward after discussion with ICU. If transfer to ICU is required the ICU nurse will organise suitable monitoring for transport. **CHW Only**: In the event of a Mobile Arrest, the Mobile Arrest Team will organise suitable monitoring for transport and is responsible for the care of the patient until transfer to definitive care.
- **Non-inpatient/Outpatient:** should be assessed by the Arrest/Code Blue team and have emergency management commenced and then be transferred to the Emergency Department for ongoing management. The Arrest/Code Blue Team Leader must notify the admitting officer on CHW 52454 or SCH 21000.

2.4.2 Adults

CHW Adult Arrest Calls

- Patients requiring ambulance transfer to Westmead Hospital (WMH)
  - Patient should be assessed and managed on the scene by the arrest team and have urgent ambulance retrieval from the scene to WMH.
  - Senior Nurse Manager to arrange urgent ambulance retrieval to WMH.
  - The arrest team leader will alert the Admitting Officer at Westmead Emergency Department 158222 and provide appropriate documentation.
  - In the event that WMH is only accepting life threatening only (LTO) cases, this can be overridden if the case is discussed with and directly accepted by one of the Emergency Physicians at WMH, phone Admitting Officer 158222.

  - If team require patient trolley, scoop or cervical spine collars the Senior Nurse Manager to page the porter (pager number 6788) to collect them from the Emergency Department and bring to scene.

- Patient requiring non-ambulance transfer to WMH – patient should be assessed by the arrest team and have their initial treatment at the scene and then be transferred to WMH in a wheelchair with hospital porter and/ or nurse escort if appropriate, or by their own transport if well enough.
- Patient not requiring further hospital assessment – patient should be assessed by the arrest team and then arrange own follow up with Local Medical Officer (LMO).
- If arrest location is unsuitable for team to manage patient while awaiting ambulance (e.g. patient privacy etc), transfer patient to the Emergency Department (ext 52454). The patient's movement to ED should be discussed with the Admitting Officer prior to moving to ensure that a bed space is available
- Mobile Arrest Form (M48CB) documentation to be completed. Pink carbon copy to be sent with patient. White copy to be given to ED administration assistant.

SCH Adult Code Blue Calls

- Adult patients visiting SCH areas who require urgent medical transfer to Prince of Wales Hospital (POWH) should have a Code Blue Call activated:
  - For all areas within SCH and POWH dial 2222 and state:
  - Code Blue
  - Caller's name
  - Location e.g. Building, Ward, Bed number
  - 'Adult' or 'Child'
- The Adult Code Blue Team (from Adult ICU) plus equipment and porter will respond. The Paediatric Code Blue Team will also respond.
- After assessing and stabilising the patient, transfer to POWH ED will be facilitated through the Adult Code Blue Team.

3 Maintenance of the Resuscitation Trolleys

3.1 Checking of Equipment

- The resuscitation trolley **must** be checked on a daily basis (or each operational day i.e. Monday – Friday) and this check should be signed for on the resuscitation checklist attached to the trolley. The following must be ensured:
- The appropriate checklist should be utilized to cross reference the correct contents of the trolley.
- Security Tags/Tamper Seals should be used following daily checks.
  - At CHW, the trolley should be sealed with the chain linked security tag (Seal) system this ensures that the correct equipment is in place in the trolley. To check

the trolley contents break the security tag (Seal) by pulling the tag or by opening a drawer.

- At SCH, the trolley should be sealed with a red and numbered disposable tamper seal. To check the trolley contents, break the seal by opening the side latch of the resuscitation trolley

The application of a security tag or tamper seal does not negate the need for daily checking of the resuscitation trolleys

- The drug drawer contains a resuscitation drug kit which is sealed and has not exceeded its expiry date. If seal is broken or kit is past its expiry date it must be replaced through pharmacy (See Appendix 4)
- Expired fluids should be replaced from ward stock or ordered through pharmacy is not a routinely stocked fluid.
- Once trolley contents have been checked and are correct re-seal security tag by feeding the chain link through the trolley handles and clip the new security tag in place. Then add the security tag number and sign on the appropriate space on the daily checklist. This helps to identify if the trolley is sealed and when it was last sealed or if it has been tampered with.
- All areas that have been allocated a defibrillator must complete a daily check. For a list of areas with a defibrillator, see Appendix 2.

3.2 Re-stocking of the trolley following an arrest

The restocking of the resuscitation trolley after an event should be attended as soon as practicable (see Appendix 4).

- At CHW, non-ward stock items can be replaced from the biomedical stockroom on level 3.
- At SCH, every effort should be made to anticipate items that are soon to expire and replacement stock should be ordered via Oracle and NOT obtained from CICU. In the event that an item has been used as part of an emergency and replacement is required urgently, this can be replaced by CICU in the short-term, however an order of stock should be obtained and an equal amount of stock be returned to CICU to replenish their supply.

4 References

1. International Liaison Committee on Resuscitation (ILCOR) Resuscitation 81S (2010) e213-e287
2. Australian Resuscitation Council (ARC) Guidelines December 2010; www.resus.org.au
3. Advanced Life Support Group. Advanced Paediatric Life Support - The Practical Approach, 5th edition. BMJ Publishing, 2010.
4. Medtronic Lifepak 20 Defibrillator/ Monitor with ADAPTIV Biphasic technology – Operating Instructions, 2004.
5. Perspectives on ADAPTIV Biphasic Technology, Medtronic 2004.
6. An Update on Biphasic external Defibrillation: Published Evidence from Clinical Research – April 2004, Medtronic.
7. Is There a Need for Biphasic Energy Greater than 200 Joules? An Evidence – Based Approach, Medtronic 2005.
8. New 2005 guidelines for Emergency Cardiovascular Care: What is the Role of escalating Energy in Treating VF? Medtronic 2005.

5 Appendix 1: Resuscitation Trolley Content Lists

The site specific Resuscitation Trolley Contents list can be found on the SCHN Intranet Forms Page under Clinical Forms or at the below links:

CHW

- Ward Resuscitation Trolley Checklist
- Mobile Arrest Trolley/Pack:

EQUIPMENT	**MOBILE ARREST TROLLEY**
Oxygen cylinder porter to bring Scoop device porter to bring Ambulance trolley porter to bring ED drug pack from fridge: • Suxamethonium 100mg/2mL – 2 amps • Rocuronium 50mg/5ml – 2 amps	Defibrillator (Lifepak 20) with ECG dots, pads & razor. Sharps container tied to top of trolley Mobile Arrest Trolley Checklist tied to top of trolley Arrest Team Access Card tied to top of trolley Mobile Arrest Pack Magnet

MOBILE ARREST PACK

OUTSIDE OF PACK	
Sleeve Pocket Under Defibrillator	**Top Pocket**
Mobile arrest documentation form x2 Envelopes x2 Pens x2	Res-Q-Vac suction device, disposable suction catheter and container Self-inflating resuscitation bags – child and adult Laerdal masks – 00-4 - one each
Bottom Pocket	**Right Side Pocket**
1000mL Normal Saline –two 500mL Glucose 10% - one Blood pump set – one Giving set - one	pads 9x20 and 20x20 – five each gauze swabs – five steristrips tegaderm
Left Side Pocket	
Sphygmomanometer Stethoscope	Neuro torch Spare ECG dots

INSIDE LID OF PACK	
Pocket 1	**Pocket 2**
Gloves – non-latex in a variety of sizes	Vomit bags
Pocket 3 (IO Needle Pack)	

IO needle 16 gauge – one IO needle 18 gauge – one T-piece extension set with needleless injection cap - two	Armboards – small/medium/large – one each Brown Elastoplast Alco wipes – five
INSIDE OF PACK	
Intubation Roll	
Two laryngoscope handles Straight blade 0, 1, 2 one each Curved 3, 4, 5 one each Spare battery and globes (small and large) Endotracheal tubes: size 2.5 (two) size 3.0,3.5,4.0,4.5,5.0,5.5,6.0 uncuffed 1 each size 6.0, 7.0, 8.0 cuffed one each.	Endotracheal introducer – small, medium & lge Magill forceps – adult, child and infant sizes KY jelly – three White tape for ETT Brown elastoplast Tinc Benz Co Disposable CO_2 detector – small (1-15kg) and large (>15kg)
Airway (blue pack with green stripe)	
Guedel airways 0-4 one each NRB Oxygen mask (1 x adult; 1 x paed) Nebuliser kit (1 x adult; 1 x paed)	Oxygen tubing Intragastric tubes 8, 10 one each
Circulation (Orange Pack x 2)	
<u>Pack 1 - Cannulation</u>	
Blunt 19G drawing up needles - five 25 gauge needles - five Butterflies 23 and 25 gauge – two each T-piece extension set with needleless injection caps – two Cannulae sizes 16,18, 20, 22, 24 gauge 3 each Tourniquets – one Alco wipes – twenty Blood gas syringes – two	Blood tubes – X-match, FBC, EUC – one each Sodium Chloride 0.9% “Posiflush” 10mL – five Steristrip packet – two Tegaderm – two Brown elastoplast Bandaids – five Cannula caps clearlink – two (NOT red combi-lock) (armboards in IO needle pack inside lid of pack)
<u>Pack 2 – syringes:</u> 2mL, 5mL, 10mL – three each	
Drugs/Glucometer (yellow pack)	
Adenosine 6mg / 2mL - 3 ampoules Adrenaline 1:10,000 & 1:1000 -5 each Amiodarone 150 mg– two amps Anginine (see glyceryl trinitrate – 1 bottle) Aspirin – 4 tablets Atropine 600micrograms – two amps Calcium chloride 10% 10mL – one amp GlucaGen Hypokit (1mg) - one	Promethazine Hydrochloride 1 x 50mg/2mL Propofol 200mg – one amp Salbutamol 0.5% solution – one 30mL bottle Sodium bicarbonate 8.4% 1x10mL amp Thiopentone 500mg one. Vecuronium 1x10mg amp; 1x 4mg amp

Glucose 50% 50mL – one vial Glyceryl Trinitrate 600 micrograms - 100 tabs Hydrocortisone 100mg vials- two Naloxone 400micrograms – two amps Lignocaine 1% - two amps Midazolam 15mg/5mL –two amps	Water for injection 10mL – five Syringes – 50mL – two each Three way connector and minimal volume extension tubing – one each Additive labels – five Red drawing up needles - ten Scissors Glucometer

SCH

- Ward Resuscitation Trolley Checklist

6 Appendix 2: Location and Features of Defibrillators

CHW

LEVEL	WARD	DEFIBRILLATOR
Level 1	Hunter Baillie	1 standard unit
Level 2	Camperdown	1 standard unit
	Emergency Department	1 standard unit + pacing 1 standard unit + pacing on Mobile Arrest Trolley
	Cardiac Catheter Lab (Radiology)	1 standard unit + pacing
	CHISM	1 standard unit
Level 3	Edgar Stevens	1 standard unit + pacing
	Cardiac Theatre	1 standard unit + pacing + internal defibrillation paddles
	General Theatres	1 standard unit + pacing + internal defibrillation paddles
	Recovery	1 standard unit
	Middleton Day Stay	1 standard unit
	Cardiology (Stress Lab)	1 standard unit + pacing
	GCNC	1 standard unit
	PICU	2 standard unit + pacing + internal defibrillation paddles
	Biomedical Engineering	1 standard unit

NB: The defibrillator trolleys include the defibrillator, pads, leads and a razor.

SCH

LEVEL	WARD	DEFIBRILLATOR
Level 0	Outpatients	R Series
Level 0	Respiratory	R Series
Level 1	Emergency	R Series
Level 1	Recovery	R Series
Level 1	C1S	R Series
Level 1	CICU	M Series (cardiac bed)
Level 1	CICU	M Series (cardiac bed)
Level 1	CICU	M Series (cardiac bed)
Level 1	CICU	R Series (resus trolley)
Level 1	CICU	R Series (resus trolley)
Level 1	CICU	X Series (transport)
Level 1	C1SW	R Series
Level 2	C2N	R Series
Level 2	C2S	R Series
Level 3	C3W	R Series
Level 7	Bright Alliance	R Series

7 Appendix 3: Team Members and Roles

SCH Code Blue Team Members Roles

Sydney Children's Hospital CODE BLUE response pager List (Updated February 2018)

IN HOURS RESPONDERS (0800-1630)

In-hours OURS CODE BLUE CALL **ESSENTIAL** RESPONDERS
• ICU Registrar
• ICU Nursing Staff (ACCESS Nurse)
• ICU Nursing staff (Team Leader)
• Anaesthetic Registrar
• Porter
• Radiographer
• Chief RMO
Other in hours CODE BLUE CALL RESPONDERS/NOTIFICATION
• Bed Manager
• ICU Fellows
• ICU Education staff
• Emergency Department Senior Medical Staff (ED SMS may attend emergency calls if able)
• ED Nursing Staff
• Nurse Educator ED (responds to ED calls only)
• ED Clinical Nurse Educator (responds to ED calls only)
• ED Clinical Coordinator (Respond to ED Emergency Calls and notification of in hospital emergencies)
• Social Work (On-call pagers, to attend ED calls only)

AFTER–HOURS RESPONDERS (1630-0800 and weekend and PHOLS)

After hours CODE BLUE **ESSENTIAL** RESPONDERS
• ICU Registrar
• ICU Nursing Staff (ACCESS Nurse)
• ICU Nursing Staff (Team Leader)
• Anaesthetic Registrar
• A/H Nurse Manager
• Porter
• Senior On Site Registrar
• After Hours Ward Registrar
• After Hours Ward RMO
• After Hours Junior Registrar
• Radiographer
Other after hours CODE BLUE RESPONDERS/NOTIFICATION
• Emergency Department Senior Medical Staff (ED SMS may attend emergency calls if able)

• ED Clinical Coordinator (responds to ED Emergency Calls and notification of in hospital emergencies)
• Social Work (On-call pagers, to attend ED calls only)

SCH staff /roles requiring notification of all SCH Code Blue events

SCH Staff requesting notification of all Code Blue calls
• Nurse Manager Patient Flow
• Nurse Manager -Staffing
• Care Continuum Coordinator (covers NM Patient Flow)
• CRMO
• Clinical Director- Nursing
• Clinical Director- Nursing
• Dep. Director Clinical Governance
• Emergency Plan Committee (Chair)
• Nurse Manager - ICU
• Clinical Development Nurse

CHW Mobile Arrest Team Members and Roles

Mobile Arrest Team Member	Roles
Medical Registrar: Arrest Team Leader	• Assume primary responsibility for resuscitation & direction of all individual personnel • Obtain history from attending staff & family • Co-ordinate resuscitation efforts: Airway, Breathing, Circulation, Disability (CNS) • Monitor ECG and cardiac output • Liaise with attending medical officer and team • Co-ordinate disposition of patient • Ensure completion of documentation on arrest form
Advanced Trainee Medical Registrar (night shift only): Arrest Team Leader	• on night shift (2230-0830hrs) the Advanced Trainee Medical Registrar will assume the Team Leader role and delegate tasks to the medical Registrar
ED Consultant/Fellow *	• Provides support for Medical Registrar
Anaesthetic Registrar: Airway/ Breathing Doctor (Does NOT need to attend Mon-Fri 0800-2300hrs)	• Airway management • Ventilation • Monitor CNS status • Accompany patient to final disposition if ventilated
Medical Resident: Circulation Doctor	• Perform manual BP if patient has an output • Obtain IV access & blood specimens • Responsible for fluid and push bolus medication administration during arrest sequence • Assist with chest compressions if required.
ED Nurse	• Bring Mobile Arrest Trolley and drug pack from ED • Attach the ECG dots and connect the patient to the ECG monitor. A paper recording of the patient's rhythm should be obtained. • Obtain a set of observations

	• Perform glucometer reading if appropriate • Prepare drugs & fluid as required • Accompany patient during transport to final disposition • Restock Mobile Arrest pack (see Appendix 1)
Nurse Manager Patient Flow/ Afterhours Nurse Manager	• Readjust nurse staffing to ensure nursing care of patient throughout resuscitation & relocation • Provide communication link between resuscitation scene and rest of hospital • Maintain resuscitation nursing team to established number and roles. • Arranges ambulance transfer to Westmead hospital for adult arrests as required. • Designate nursing staff to accompany patient to receiving unit • In absence of Social Work staff performs functions described for Social Worker below. • Ensures documentation is completed and forwarded appropriately. • Ensures maintenance of patient privacy.
Social Worker	• Assist family to a designated area • Counsel & support family throughout resuscitation • Ensure follow-up dependent on outcome of resuscitation
Porter	• Brings oxygen cylinder, extraction equipment & patient trolley from ED to arrest scene • Assists with movement of patient • Assists with transfer of patient to appropriate unit for further management
Security	• Assists with movement of patient • Be available to assist ambulance paramedics to scene • Assists with bystander crowd control

Note: * When ED Consultant/Fellow unavailable (mainly on night shift) the ED cubes registrar will attend instead if able.

8 Appendix 4: Resuscitation Trolley action after an arrest