RESUS4KIDS

Short Practical Course

Instructors Manual

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Disclaimer

TRAIN THE TRAINER

The 4.5 hour train the trainer workshop has been designed to provide new RESUS4KIDS (R4K) instructors with the information and resources required to teach the scenario based education. These workshops are targeted towards practitioners who display a keen interest in delivering paediatric resuscitation in a multidisciplinary training environment.

On completion of the train the trainer workshop the learner will be able to:

- Confidently teach each session including communication and teamwork and the scenario based education session.
- Understand the resources, obligations and requirements needed to conduct the RESUS4KIDS course.
- Recognise potential barriers and challenges that may occur while teaching the course and be aware of different ways to troubleshoot these problems**.**

Pre requisites for becoming a RESUS4KIDS instructor

Please refer to the current governance document available online at: www.resus4kids.com.au.

Requirements and resources for running the short practical course

- Instructors are responsible for ensuring that all participants meet the course participant prerequisites, including recommendation by their line manager if required.
- Instructors must follow the course format, unless prior approval has been obtained from the RESUS4KIDS executive.
- The instructor to student ratio must not exceed 1:6, unless prior approval has been obtained from the RESUS4KIDS executive. Participant numbers may be less than 6 at the instructor's discretion .A minimum of 4 participants are recommended in order to allow participants to demonstrate effective teamwork in the scenarios.
- Instructors may use a working defibrillator or other simulator in place of the laminated cards. Instructors should be familiar with the safe use of a live working defibrillator in a simulation environment and have a suitable rhythm generator and charge dump device, as well as permission from their line manger to use a live device.
- Resources for setting up, running, evaluating and reporting courses are available at www.resus4kids.com.au under 'instructor resources'. These include:
    - RESUS4KIDS Governance Document.
    - Course record of attendance form.
    - Algorithm – Paediatric Life Support for Healthcare Rescuers and Choking Child.
    - Training video – Surgeon parts 1 and 2, MET Call in Focus parts 1 and 2 or Sea patrol
    - Zin Obelisk resources
    - List of equipment required for the practical course.
    - Defibrillator Pictures (VF, PEA, asystole, blank defib).
    - Instructor Manual with Scenario Lesson Plans.

- Registered instructors will be emailed the password to access the secure page when they complete the train the trainer course. Please note that the password will change periodically and the instructors will be notified of this change by email.

EQUIPMENT REQUIRED

Room (1 room per instructor to run the scenarios separately, communication and teamwork can be run in a larger group).

Infant / Child ALS Manikin (1 per instructor). Participants must be able to perform a chin lift, jaw thrust and insert a oropharyngeal airway into the manikin.

Computer and projector – ensure sound volume is adequate beforehand, you may need to purchase an external speaker.

Access to either the Surgeon, MET Call in Focus or Sea Patrol videos – suggest download beforehand or alternatively the Zin Obelisk game cards and instruction sheet.

Attendance Record Sheet – ensure you are using the most up to date by checking www.resus4kids.com.au under 'instructor resources'.

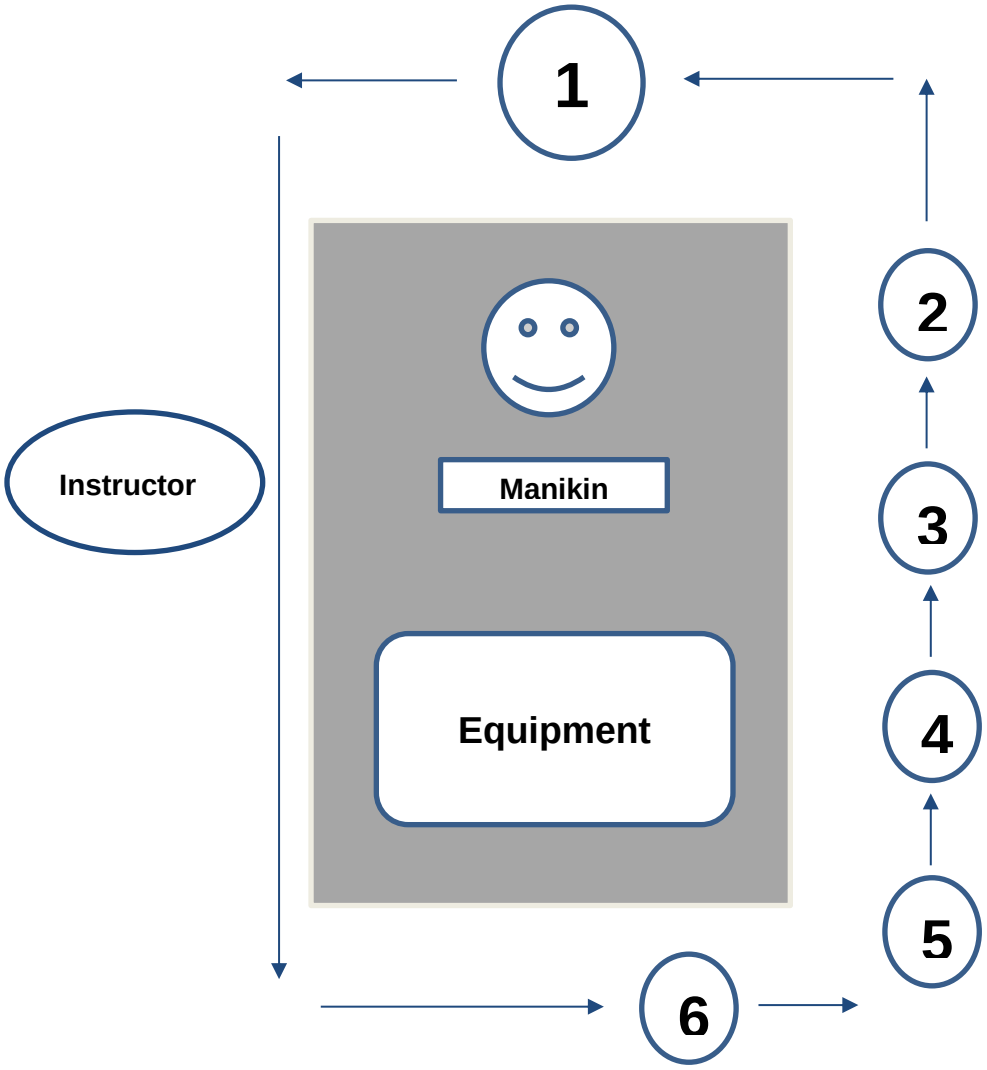
Instructors need to ensure that all equipment is in working order prior to commencing the session e.g. check that lungs inflate on manikin, teamwork videos play etc.

- 1 x Laerdal adult pocket mask
- 1 x paediatric self-inflating resuscitation bag
- 2 - 3 x masks to demonstrate correct sizing
- 1 x Yankauer suction catheter
- 2 x tongue depressors
- 2 - 3 x Guedel Airways to demonstrate correct sizing
- 6 x Laminated Cards
    - Defibrillator – turned off
    - Defibrillator – sinus rhythm
    - Defibrillator – asystole
    - Defibrillator – ventricular fibrillation
    - RESUS4KIDS paediatric life support flowchart
    - Managing the choking child Algorithm
- 1 x infant defibrillation pads
- 1 x set of ECG leads and dots (may use manikin leads)
- 12 x tennis balls
- 1 x blutack (for attaching pads to manikin)
- Sheet of blank labels for names of participants
- Optional: 1 - 3 x Nasopharyngeal airways to demonstrate correct sizing
- Optional: 2ml syringe to use as Adrenaline dose

For paramedic educators you will need to adapt the equipment list to the equipment that your paramedics carry. Example: 2 different size paediatric self-inflating resuscitation bags instead of the different size masks.

Table set up for ‘Round the Table’ Teaching

Teach the first scenario using the ‘Round the Table’ method. It is an effective way to teach the first scenario as every member of the group has an opportunity to demonstrate a different part of the DRSABCD algorithm, which makes the process less threatening and means that every member of the group has a turn of participating. Set the table or bed up as shown below. The numbered circles represent where the 6 participants stand.



Steps performed by the different participants

Participant 1: Assess for danger.

Participant 2: Check for a response.

Participant 3: Send for help.

Participant 4: Chin lift, jaw thrust, size and insert a Guedel airway.
All participants now do this in turn.

Participant 5: Assess for breathing, give rescue breathing using bag and mask ventilation. All participants now do this in turn.

Participant 6: Compressions, with participant 5 ventilating. All participants now do this in pairs with a 15:2 ratio.

1. Participant 1 identifies different ‘Dangers’ to be aware of when you approach a collapsed or unwell child. Once they have done this and the instructor is happy to move on participant 1 moves around the table to where participant 6 was standing and all group members move up a place. This now places participant 2 at the head of the bed to check for a ‘Response’.
2. This process continues until the participants reach ‘Airway’. Once the participant at the head of the bed has demonstrated the different components of ‘Airway’ each member of the group moves around the table and all demonstrate the different clinical skills. When every member has demonstrated these skills the participant who was next to have a turn at the head of the bed steps up and demonstrates ‘Breathing’.
3. When the participants reach ‘Circulation’ and need to demonstrate compressions the group now works in pairs with one person demonstrating compressions while the other gives rescue breaths. Once both participants have demonstrated both sets of skills another pair then has a go. The last pair demonstrating compressions and rescue breaths continue doing so and the rest of the group now work as a team to care for the patient in real time.

COMMUNICATION AND TEAMWORK

Human factors

Human factors are issues that affect a person's performance (human performance). Human factors involve non-technical skills (NTS) that are required to deal with a crisis such as communication, language, tone of voice, leadership and role identification. Non-technical skills refers to attitudes and behaviours, not directly related to system management or standard operating procedures which influence patient safety.

Crisis Resource Management

Crisis Resource Management (CRM) training addresses the non-technical skills necessary for effective teamwork (Carne, Kennedy & Gray, 2012). CRM was developed after it was identified that human error caused by teamwork failure led to unnecessary deaths or patient complications (Carne, Kennedy & Gray, 2012). There are 5 principles of CRM used in RESUS4KIDS.

- Establish a leadership role.
- Communicate effectively.
- Appropriate resource utilisation.
- Anticipate and plan.
- Maintain situational awareness.

The information below can be used to enhance your group discussion during the teamwork and communication section of the RESUS4KIDS short practical course.

Establish a leadership role.

- Leads and coordinates patient care.
- Maintain situational awareness.
- Leadership style should employ the least confrontational approach. Awareness that leadership style can influence team dynamics.
- Encourage a shared sense of purpose, a focus on results and a collaborative environment.
- Ensure clearly defined roles for team members. This reduces role confusion.
- Establish priorities for the team.
- Verbalise priorities, goals and clinical findings as they change so that all team members are aware of the patient's condition. Leaders can also summarise the patient's condition to allow the team to review progress.
- Does not necessarily have to be the most experience clinician, however must be able to coordinate the team.
- All decisions need to flow through the team leader.

Communicate effectively.

- Effective communication distributes important information to other team members and facilitates continuous updating of the patient's condition Using team members names in order to gain their attention.
- Being specific when requesting a task to be completed. A good way to do this is closed loop communication. It is an effective tool to facilitate information exchange and confirm task completion.

It involves:

- The sender initiating a message.
- The receiver receiving the message, interpreting it and acknowledging its receipt.
- The sender ensuring the intended message was received.
- Task complete "drug given" for scribe inclusion.

Appropriate resource utilisation.

- This applies to staff, equipment and your environment.
- Assigning the right role to the right person. This can be done by understanding different people's roles, skills and level of experience.
- It is the team leader's responsibility to ensure the work load is being distributed evenly amongst the team. In turn it is the team member's responsibility to feed back to the team leader if they have too many tasks.
- Regular training to ensure clinicians familiarity with critical care equipment and its appropriate use.

Anticipate and plan.

- Relevant at all levels of performance.
- Focused on forward planning and preparation.
- Thinking ahead to what might happen and developing a plan for that contingency: plan A, plan B.
- Call for help early. It is easier to send people away if not required.
- Practical examples.
- The use of checklists.
- Training: mandatory training, simulation.
- Allocation of roles at the start of a shift.
- Know your environment. Regularly checking your resuscitation equipment at the bedside and in the resus trolley. This will ensure that it is all in date and working order as well as ensuring that you know where equipment is stored. This is the opportunity to ask if you are unfamiliar- "you either need to know how to use it or how to assist".

Maintain situational awareness.

- It is very easy to become tasked focused or focused on one abnormality in a stressful situation. Task focus is not a bad thing, concentrating on the different tasks is important however it is important for one person to see the 'big picture'.
- Allows for awareness of the big picture. This helps to ensure that important changes in the patient's condition are not missed.
- Appropriate delegation of tasks and involvement of other team members is a necessary step to maximizing situational awareness.
- Awareness of potential dangers/ risks to staff e.g. defibrillation, possible infectious causes, crowd control.

Achieving high situational awareness can be achieved by:

- Going through a checklist (e.g. routine equipment checks, primary / secondary survey).
- Having standard procedures / policy and procedural guidelines.
- Announcing procedural steps.
- Involving the whole team.
- Alerting self or others to unusual events which have caused error in the past.
- Stopping for any red flag.

Graded Assertiveness

When caring for a patient as part of a team it may come to a clinicians attention that by an **action** (such as operating on the incorrect limb) or an **omission** (such as failing to confirm endotracheal tube placement with end tidal CO2), one of their colleagues may potentially be causing harm to a patient.

It's very unlikely that this is deliberate. Most mistakes are accidental and happen to clinicians who are intending to do the best for the patient at the time. Therefore, in the majority of circumstances raising an issue politely to the person concerned will result in a positive discussion and resolution to their concerns.

Occasionally raising a concern may be difficult. This may be due to a lack of confidence, a lack of certainty or a hostile environment. In particular, raising concerns to a more senior clinician can be challenging.

Being able to raise concerns, and advocate for the patient, is a skill that needs to be practised as failing to do this may have a severe impact on the patient. An example is the case of a patient who had the wrong kidney removed in 2000 in the UK, despite a medical student in the operating theatre being aware what was happening (http://www.telegraph.co.uk/news/uknews/1398408/Surgeons-who-removed-the-wrong-kidney-are-cleared.html).

Graded assertiveness is a well described method of escalating a concern, starting with a non-threatening question. It is important to realise that the clinician who is making the potential mistake may feel embarrassed or upset by their actions or inactions and raising the concern gently at first is essential. The aim of graded assertiveness is to start at the lowest level possible and increase your level of assertiveness if the situation demands it. You should only move up a grade if you get an unsatisfactory response from your previous attempt to raise your concern.

One method of Graded Assertiveness is the PACE approach.

PACE approach

Probe	"do you know that…?" or express your concern using an 'I' statement, "I am concerned about . . . "
Alert	(offer an alternative) – "Can we re-assess the situation…?" or "Would you like me to . . ."
Challenge	"Please stop what you are doing while…" or ask for an explanation, "It would help me to understand . . ."
Emergency	"STOP what you are doing!" or "For the safety of the patient we need to .....now."

Example:

A clinician is about to start feeding via an NG tube without confirming acidic gastric aspirate.

Probe: "Have we confirmed the tube is in the stomach?"

Alert: "We need to ensure the tube is in the stomach rather than the lungs. Did you get acid contents on the pH paper?"

Challenge: "I am concerned that we haven't confirmed that the NG tube is in the stomach and we shouldn't be feeding until we have as I am worried the patient may get feed into their lungs."

Emergency: "Please stop what you are doing immediately. I am concerned that you may be harming the patient. I am going to get help."

SCENARIO BASED TEACHING

Scenario based teaching creates a highly engaging learning opportunity, placing learners in a situation that mirrors reality and requests the learner to make behavioural choices. It represents a pulling together of knowledge and skills and involves aspects of cognitive, affective, psychomotor and interpersonal training.

Objectives of scenario based teaching include:

- Clinical focus.
- Situational factors / situational awareness.
- Multi-professional and cross sectional target audience.

Types of scenario based teaching include:

- Pause and discuss.
- Simulated problem based learning.
- Immersive scenario.

Barriers to effective communication with your participants

- Using long words and / or jargon.
- Language differences.
- Boring presentations.
- Equipment failure.
- Having preconceptions.

Feedback

Feedback needs to be accurate and will assist the learner in making progress. Learners cannot improve unless they know where improvement is necessary and how the improvement may be made.

Feedback should be:

- Descriptive.
- Supportive.
- Positive and constructive.
- Specific and accurate.
- Realistic.
- Timely.

There is no formal practical skills assessment during the R4K short practical course. Participants' skills are instead continually observed during the first scenario and continual feedback is provided to participants.

Discussions and debriefing

A successful discussion or debrief:

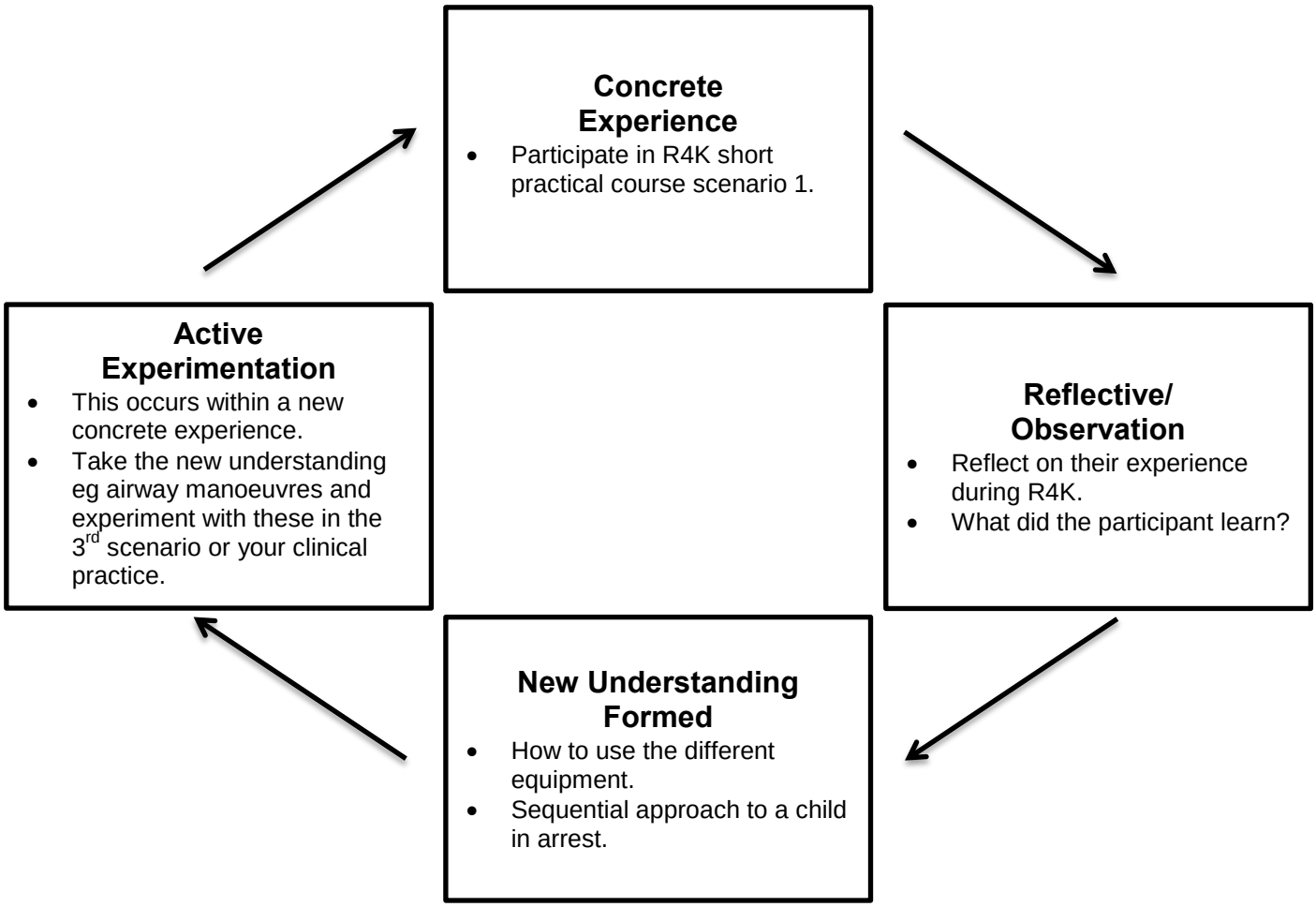
- Spirited discussion within the group.
- The instructor didn't talk too much and facilitated discussion rather than lectured.
- Everyone in the group was involved in discussion.
- Everyone, including quieter participants feel safe contributing.
- Vocal participants were managed courteously.
- Participants learnt from each other and the session promoted interdisciplinary awareness.

(Mackway-Jones and Walker, 1999)

Adult Learning Principles – overview (Knowles, 1990)

- Adults are internally motivated and self-directed.
- Adults bring life experience and knowledge to learning experiences.
- Adults are goal orientated.
- Adults are relevancy orientated.
- Adults are practical.
- Adult learners like to be respected.
- Adults have their own individual style of learning.

Kolb's Learning Cycle (Kaufman, 2010)



Reflective practice is important as it enables individuals to learn from experiences through reflecting on what has been learnt. This forms the basis of new ideas which in turn impacts on how we practice as clinicians. Kolb's learning cycle shows the learning process that participants need to go through to transform the knowledge and skills learnt from the R4K program into clinical practice.

C.O.A.C.H.E.D. Approach for Defibrillation

The C.O.A.C.H.E.D. acronym is a useful tool for both yourself and participants to remember the ARC approach to defibrillation. Here is a break down in how the C.O.A.C.H.E.D. approach can be applied to a resuscitation situation.

Compressions Continue	Person in charge of the defibrillator to say, '**compressions continue'.**
Oxygen away	Person in charge of the defibrillator to say, '**remove free flowing oxygen'.** Any free flowing oxygen at this point is to be removed from the patient.
All else clear	Person in charge of the defibrillator to say, '**everyone else stand clear'** Everyone other than the person doing compressions is to stand clear of the patient.
Charging	Charge the defibrillator to the appropriate joules.
Hands off/ I'm safe	Person in charge of the defibrillator to tell the compression person '**hands off'.** At this point the person doing compressions is to stop compressions step away from the patient raise their hands in the air and respond **'I'm safe'.**
Evaluate rhythm	Evaluate the patient's rhythm. Is this a shockable or non-shockable rhythm and vocalise this to the team.
Defibrillation or disarm and dump	Either defibrillate the patient if they are in a shockable rhythm or disarm and dump the shock if the child is in a non-shockable rhythm, **prior to checking ROSC.**

Note: As in adult practise it's up to the experienced team leader to decide after the first few cycles of a non-shockable rhythm whether to continue with the COACHED approach.

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RESUS4KIDS SHORT PRACTICAL COURSE - LESSON PLAN

Topic	**RESUS4KIDS** **Paediatric Life Support for Healthcare Rescuers**	
Trainers	Trainers who have undertaken the RESUS4KIDS Train the Trainer course.	
Participants	Healthcare workers caring for acutely unwell children. **Maximum 6 participants per trainer.**	
Timeframe	90 minutes.	
Training objectives	By the end of the 90 minute practical course participants will be able to: • Explain why good **TEAMWORK AND COMMUNICATION** are essential for optimal outcomes in resuscitation (use names, allocate and accept roles). • Manage an infant or child's **AIRWAY** (open and clear the airway and maintain it open). • Perform effective **BREATHING** (slow breaths with chest rise). • Demonstrate effective minimal interruption cardiac **COMPRESSIONS** (push hard, push fast, allow full chest recoil). • Recognise and provide initial management of shockable and non-shockable cardiac **RHYTHMS.** • Demonstrate a knowledge of safe **DEFIBRILLATION.**	
Prerequisites	**All participants at the short practical course will be expected to have undertaken all the RESUS4KIDS E-learning modules prior to attending the session. This requires that they have completed the post course test with a pass mark. When this is achieved the participant will be able to print a certificate. Instructors must site this certificate.**	
Preparation	1. Assemble all equipment and ensure that it is in working order. 2. Arrange equipment and manikins on the tables.	
Welcome & introduction	Brief overview of RESUS4KIDS. State the learning objectives. Toilets and fire exits.	**5 minutes**
Confidentiality	At the beginning of the course it is important to talk to all participants about the importance of confidentiality. You need to try and create a safe learning environment for your participants and it is important to explain to them that it is inappropriate to discuss other participant's performance after the course has finished.	
Teamwork component	Use ball game, videos or Zin Obelisk for facilitated discussion and feedback.	**25 minutes**
Scenario based teaching	Pause and discuss format, scenario based teaching.	**60 minutes**

Teamwork component

2 minutes

There are a number of teamwork, leadership and communication activities that you can now choose from when teaching the first 30 minutes of the Resus4Kids program. All the games and videos are designed to be used across all levels of experience with the exception of the Zin Obelisk game, this is designed for a group of senior clinicians to build on their experience and knowledge with the concept of Teamwork, Leadership and Communication.

The Ball Game followed by the videos, 'The Surgeon', 'MET Call in Focus' or 'Paediatric Anaphylaxis' are all designed to explore the concepts of Teamwork, Leadership and Communication. The 'Sea Patrol' videos are designed as a stand-alone tool exploring the concept of Graded Assertiveness and can be used during this session.

Specific learning points to bring out during the 30 minute session.

- Display and use names wherever possible.
- Recognisable team leader.
- Team members' participation.
- Allocate / accept roles.
- Concise, clear communication / closed loop communication.

Introduce session objectives and learning points and make the link with effective delivery of care to patients.

Suggested introduction for the first 30 minutes of the Resus4Kids program.

Introduction when using the videos 'The Surgeon', 'MET Call in Focus' and 'Paediatric Anaphylaxis'

'For the first part of today's session we are going to explore the concepts of teamwork, leadership and communication. We are going to do this by playing a game and watching a couple of short videos. The reason that we include teamwork, leadership and communication training in the Resus4Kids program is that a number of adverse events happen in hospitals around the world each year because of a breakdown in these elements.'

Introduction for groups that the instructor has chosen Zin Obelisk as the teaching tool:

'Over the last few years of completing Resus4Kids you have been introduced to the concept of teamwork, leadership and communication. These are all essential skills required by healthcare professionals as a breakdown in any of these elements can lead to an adverse events for patients. Today you are going to have the opportunity to demonstrate the skills and knowledge that you have learnt from playing the tennis ball

	game and watching the surgeon and met call in focus videos by playing the game Zin Obelisk. The aim of this game is to provide you with an opportunity to put into practice your teamwork, leadership and communication skills.' **Introduction for groups that the instructor has chosen Sea Patrol as the teaching tool:** *'For the first part of today's session we are going to explore the concepts of teamwork, leadership and communication. These are all essential skills required by healthcare professionals as a breakdown in any of these elements can lead to an adverse events for patients.. We will watch 3 short videos from the TV show Sea Patrol and then practise graded assertiveness using clinical scenarios.'*	
	Tennis Ball Game: Works best with 6 participants. Participants stand in a semicircle (clear chairs). **Learning objectives:** 1. Understand the importance of communication and the use of **names** during a resuscitation. 2. Identify the importance of having an identifiable **team leader.** 3. Understand the importance of appropriate **task allocation** in a resuscitation. Choose the right person for the right job. **Rules**: Introduce the game: We are going to play a ball game. Everyone needs to stand up and form a semi-circle. Make sure everyone is wearing a name badge that is easily visible. Catch the ball and throw it to someone else in the group, they then need to throw it to another person, and so on. • The ball needs to keep moving amongst the team. • Don't drop the ball! • Don't throw the ball back to the Instructor. • Don't hurt anyone else in the group. • Don't break any equipment. As participants get more confident with passing one ball start to add in more balls adding them quicker as time passes. **Facilitated feedback:** Note initial performance and how it improved as the game went on and comment on: What do the tennis balls represent?	**10 minutes**

Facilitator discussion points

- *Tennis balls represent the different tasks that happen during a resuscitation. When there is only one ball (task) it is easy to keep the ball moving without dropping it as the group is able to focus on the one ball. The more tennis balls (tasks/ people) the harder the task became as there were more balls to focus on.*

What strategies can you or did you apply to this games that could also be applied to a resuscitation to help you manage a chaotic situation?

Facilitator discussion points.

- *Using names: There is ownership of a task when allocated using a person's name. The task is more likely to be completed. The danger of saying 'someone' is that no one takes owner ship of the task and it may not get completed.*
- *Team leader: A team leader can bring order to the chaos by offering a solution such as passing the ball to the person on the left. In a resuscitation they are in charge of moving the group through the DRSABCD approach to a collapsed child.*

Is it enough to say someone's name and then throw them the ball?

Facilitator discussion points.

- *Closed loop communication. Need to wait for the person to respond and let you know that they are ready to catch the ball. By allowing them to respond you are also able to determine if they have understood the task they have been given.*
- *Clinical Relevance: This is particularly important with drug orders in a resuscitation to make sure that the drug order is correct and to prevent calculation errors.*

Who caught the first ball of the game? Was this a reasonable task?

Facilitator discussion points.

- *Appropriate task allocation: You need to ensure that the person given the task has the clinical skills to perform the given task. It is the team leaders responsibility to allocate what they believe to be a reasonable task for a team members role however if the team member does not have that skill they need to speak up. Patient safety is important and we should not be working outside of our scope of practice in a resuscitation.*

Did anybody think about any of these ideas during the game? If yes why did you choose to/ choose not to vocalise these ideas?

Facilitator discussion points.

- *If ideas were vocalised: discuss why the person offered the solution that they did. It may be that they have played the game before. Relate this to the clinical environment by discussing how we learn from previous experiences and these experiences influence how we approach future resuscitations. Discuss with the team why they chose to follow the suggestions e.g. They seemed reasonable, made sense. Relate this back to the clinical environment as we see the same thing happen.*

- *If ideas were not vocalised and people thought of them: Discuss*

	this in relation to the clinical environment. If you see your team struggling to care for a patient and you have either an idea or solution are you going to keep it to yourself? There are several ways to play this tennis ball game and it can be adapted well to individual teams. The game will play out differently every time depending on the group and be successful if the facilitator picks up on the feedback from the participants and relates the game to an emergency situation using previous discussion points.	
	'The Surgeon' video: **Acknowledgements.** These videos are taken from a commercial television series called 'The Surgeon'. The segments are edited and distributed with the permission of Mr John Edwards of Southern Star. **The videos** Introduction: Provide participants with a general introduction about the video with a pre-warning about the content - colourful language. Emphasize that the video is an education tool in relation to TEAM WORK, LEADERSHIP & COMMUNICATION. An example of an introduction: *'I am going to show you 2 short videos taken from an old TV show called 'The Surgeon'. The reasons I am showing you these videos is to build on the conversations we have been have been having about teamwork, leadership and communication. I will pre warn you that the language in these videos is very colourful but I'm showing them to you to emphasis the important of teamwork, leadership and communication.'* **Ask**: What did this team do well? *Facilitator discussion points.* • *nursing initial assessment, early call for help, initial CPR.* What was their communication like? How did this contribute to the atmosphere of the resuscitation? *Facilitator discussion points* • *The communication (volume, tone, body language, words) all indicated that Lockie was stressed. This stress became contagious to the rest of the team who became paralysed. This prevented the team from thinking through the correct clinical management for the patient.* • *The word fat: discuss with the group the importance of preparation and planning as it is unacceptable to blame the patient for our own inability to care for the patient. Instead we need to be prepared by having the right equipment and staff available if a patient were to deteriorate.* Who was in the room watching Lockie?	**20 minutes**

Facilitator discussion points.

- *The other patient. Patients watch us as we interact with other patients and families.*
- *The other team members are watching Lockie. Discuss how he is coming across professionally.*
- *If this is a paediatric resuscitation the parents would be present in the room. Again emphasising how we come across professionally is important and directly influences the level of confidence that our patients and their families have in us as there healthcare provider.*
- *It is for all of these reasons that the language Lockie was using is inappropriate.*

Who was in charge?

Facilitator discussion points.

- *Discuss if there was a team leader or a person making a lot of 'noise'. If there is a person in the team that is making a lot of 'noise' the rest of the group will often look to them to lead even though they may not be confident or competent to lead.*
- *Discuss the impact of the team leader's attitude / behaviour / language on other team members.*
- *Discuss the importance of clarifying who is going to be the team leader and not to assume that because a doctor walks into the room that they are happy to team lead.*

If you were the team arriving to help what would you do to improve this situation?
Facilitator discussion points.

- *Have participants identify what elements of teamwork, leadership and communication they would change in this first video before showing the second video.*
- *Specific points to consider for team members confronted with an unfamiliar situation are:*
- *Call for the appropriate help early & maintain basic resuscitation priorities till other expertise arrives.*
- *Work within your scope of experience.*
- *Maintain an outwardly calm façade.*

If people are upset by the first video, try and turn a negative into a positive.

- The word FAT. It is unacceptable to blame a patient for your own inability to perform clinical skills. We care for all patients no matter their shape, size or cultural background. Everyone needs to be treated with respect and dignity.

The colourful language displayed in the first part of 'The Surgeon' video demonstrates the negative effect that inappropriate language has on individuals as well as the team. The second part of the video shows a more experienced and skilled team leader and team members.

Show the second part of the video.

Suggested Questions:

How is Lockie feeling? What needs to happen for him to be confident in a future arrest?

Facilitator discussion points.

- *Lockie requires debrief and further education so that next time he is faced with a resuscitation he is confident and competent to do his job.*
- *In a resuscitation the patient is important however the team members are also important. As a team we are responsible for each other.*

What did they do that was different to the first team? How did this influence the arrest situation?

Facilitator discussion points.

- *Clear team leader: There was an identified team leader who allocated tasks to individuals using their names. He also reassured the team members.*
- *Teamwork: Each team member had a clear role and as a result they worked together as a team.*
- *Communication: The team leader spoke in a clear voice and did not yell or swear. This calmed the team down. We also saw closed loop communication between the team members and the team leader.*

Should the team leader be intubating? Why or why not?

Facilitator discussion points.

- *Discuss the impact of task focus vs situational awareness: Both task focus and situation awareness are good. It is important to understand that you can't be both task focused and situationally aware at the same time. The danger is if the team leader becomes tasked focus mistakes happen as things get missed. It is also important to acknowledging that the team leader if often the most experienced clinician and sometimes has the clinical skills required. If this is the case the team leader needs to hand this role over while they perform the task so that at all times someone maintains situational awareness.*

Discuss if participants thought the team leader wanted the arterial line.

Facilitator discussion points.

- *The team leader's response is open to interpretation. It is not clear if he did or did not want the arterial line. In a resuscitation there is no room for interpretation,* assumptions or presumptions.
- *To engage a group of nurses ask if they were in a similar situation where they felt an NG tube would be useful and were met with a similar response "Only have one go and don't make the nostril bleed and mess up his airway". Show of hands who would place the NG Tube?*

Leadership and Teamwork in Medical Emergency Teams: MET Call in Focus

25 minutes

NB: If you use this resource the videos are longer and you should allow an extra 10 minutes to deliver the content.

Acknowledgements

This resource has been adopted and modified with the permission of Professor Cobie Rudd, Pro-Vice-Chancellor (Health Advancement) at Edith Cowan University.

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Office of the Pro-Vice-Chancellor (Health Advancement) from Edith Cowan University (Perth). (2012). *Interprofessional Learning through Simulation. Leadership and teamwork in Medical Emergency Teams: MET call in Focus*. Retrieved 6th March 2013, from http://www.ecu.edu.au/community/health-advancement/interprofessional-ambulatory-care-program/interprofessional-learning/ipl-through-simulation/leadership-and-teamwork-in-medical-emergency-teams

Further information on this resource is available from the link above, including a detailed facilitators manual and literature review.

Background

Mr Keane is a 78 year old man with a history of congestive heart failure who had been admitted to hospital with an episode of Acute Pulmonary Oedema (APO) for which he initially required Bi-level Positive Airway Pressure (BiPAP). The original problem has been resolved but he has developed hospital-acquired pneumonia as a result of a left lower lobe lung infection. He requires daily chest physiotherapy for this. Around midday on day five of his hospital stay Mr Keane has got out of the shower and is attending his scheduled physiotherapy session.

The videos

Met Call in Focus consists of two video scenarios, the first demonstrating sub-optimal performance of the healthcare team, with the second demonstrating more effective performance, improving the patient experience and outcome.

These videos like 'The Surgeon' are shown to identify the importance of Communication, Leadership and Teamwork, with specific areas addressed in this scenario including:

- Interprofessional communication.
- Client centred care.
- Leadership characteristics.
- Role clarification.
- The expected response to a clinical deterioration.

An example of an introduction:

'I am going to show you 2 short videos that have been provided to RESUS4KIDS by Edith Cowan University called Met Call in Focus. The people in this video are all actors. I'm showing them to you to emphasis the important of teamwork, leadership and communication.'

Show the first video of 'Met Call in Focus' (3min, 51 secs).

Suggested Questions for part one:

What are your initial thoughts on this video from a teamwork, leadership and communication point of view?

Facilitator discussion points.

- *Use this question to gauge what your participants are thinking about after watching the video.*

What was the communication like in this video?

Facilitator discussion points.

- *The language was negative, blaming and belittling. This created a negative team environment and hindered the team working together to care for Mr Keane.*
- *Patient centred care: No one spoke to or listened to the patient who was scared but also giving important clinical information to the team. Relate this to the patience confidence in the team caring for him. When relating this to a paediatric scenario you need to explain things to the parents as well as the child at an age appropriate level.*

Did this video demonstrate effective teamwork? Why or why not?

Facilitator discussion points.

- *Discuss that while there were a group of people in the room they were not working as a team. They were each focused on their own task and were not communicating with each other. The team were not working as a team but rather as a group of individuals.*
- *Allied health worker: discuss with the group the roll of allied health professionals. They can be a part of the team if one is available and at least they should stay and assist until further help arrives.*

Was there a clear team leader? If yes, were they an effective team leader?

Facilitator discussion points.

- *No clear allocation of a team leader: In this video there was no clear team and it could be seen as multiple people competing for the role of the team leader. Highlight the importance of clearly identifying who the team leader is in a resuscitation.*
- *There was no team leader that had situational awareness – one was busy reading notes, another trying to get an IVC in and the other drawing up medications.* Discuss with the group the impact of task focused vs. situational awareness in this scenario. No one in the team had situational awareness. They were all performing different tasks and became task focused. This resulted in the patient becoming unresponsive for a period of time before the team became aware that the patient had arrested.

What response would you like to see from the Physiotherapist and the Enrolled Nurse?

Facilitator discussion points.

- This is an opportunity to reinforce your organisation's deteriorating patient protocol (DETECT or DETECT Jnr in NSW).
- Recognition of **D**eterioration.
- Systematic **E**valuation of the patient.
- Immediate **T**reatment.
- **E**scalation of care (Call for help).
- **C**ommunicating in **T**eams.

Show the second video (5 mins 45 secs).

Suggested Questions for part two:

What was the communication like in this video? What impact did this have on the teamwork in this scenario?

Facilitator discussion points.

The team were communicating with each other and Mr Keane. This resulted in the team working as a team and a better outcome for the patient.

What where the key difference in relation to communication, teamwork and leadership in this video? How did these affect the team dynamic and ultimately the patient's outcome?

Facilitator discussion points.

- *There was no blaming of each other.*
- *People were finishing their sentence, 'No I can't give that medication as I am an enrolled nurse.'*
- *They listened to the patient and informed him of what was happening as they cared for him. Instilled confidence in their patient.*

Outline how care was delivered differently.

Facilitator discussion points.

- Listening to the patient meant treating the patient, preventing his cardiac arrest.
- Talking to patient about MET team arriving.
- Talking to patient about what is wrong and care given
- DETECT approach.
    - Recognising this is clinically important deterioration.
    - Systematic assessment including physiology.
    - Recognition that assessment is abnormal and activation of MET team.
    - Provision of immediate treatment – Oxygen and patient positioning.

Encourage participants to reflect on their practice and how the issues identified may apply to themselves and their workplaces.

‘Paediatric Anaphylaxis’ video:

30 minutes

Acknowledgements

This resource has been developed by Kids Simulation Australia at the Sydney Children’s Hospitals Network for use by Resus4Kids Education and Training Program. It is a dramatization using a simulated scenario of a deteriorating child in a ward within a hospital. It does not portray real clinical practice or policy in any NSW Health organisation.

Background

Storm is a 7 year old boy who has been an inpatient receiving treatment for an infection. His father has been at the bedside for the entire admission. Storm has a history of anaphylaxis to peanuts.

Following administration of his medication for the infection, Storm begins to deteriorate.

The Videos

Paediatric Anaphylaxis consists of 2 video scenarios, the first demonstrating sub-optimal performance from the healthcare team, with the second demonstrating a more effective performance, improving the patient experience and outcome.
These videos are shown to identify the importance of Communication, Leadership and Teamwork with specific areas addressed in this scenario including:

- Interprofessional communication
- Family centred care
- Leadership characteristics
- The use of names
- The expected response from a healthcare team to a clinical deterioration.

An example of an introduction

‘I am going to show you 2 short videos that have been provided to Resus4Kids by Sydney Children’s Hospitals Network called Paediatric Anaphylaxis. It is a simulated scenario depicting real events. These are teaching videos with the aim to emphasise the importance of Teamwork, Leadership and Communication’

Show ‘Paediatric Anaphylaxis’ Part 1 (2min and 30 secs)

Suggested questions for part one;

What did this team do well?

Facilitator discussion points:

- *Recognised the arrest and started CPR*
- *Recognised they needed help and called for the arrest team*

What was the team’s communication like?

Facilitator discussion points;

- *The tone was negative, the language was blaming and belittling. This created an ineffective team environment*
- *No one explained the situation to the parent, he was dismissed and told to move out of the way*

- *No one spoke to the child, he would have been scared and upset*
- *The team members spoke over one another and not listening to each other*

What was the communication with the parent like?

Facilitator discussion points

- *The team members were dismissive of the parent*
- *Nothing was explained to the parent which led to him becoming quite obstructive*
- *The nurse wanted the parent out of the way but did not explain anything to him*

How did this type of communication contribute to the actions of the team members?

Facilitator discussion points

- *Frustrations around not having the necessary equipment at the bedside and blaming each other*
- *Anger at the parent for trying to care for his child when he thought no one else was*
- *Not listening to the parent or the child and then the child deteriorated quite quickly*
- *The teams performance during the arrest was not conducive of effective teamwork*

Who was the team leader?

Facilitator discussion points

- *No clear team leader*
- *Lots of shouting*
- *No clear instructions to anyone in particular*
- *'orders' were given*

If you were involved in this situation, what could you do to improve the management of this patient?

Facilitator discussion points

- *Participants to identify what elements of teamwork, leadership and communication they would change*
- *Specific points to consider are:*
    - *Call for help early and prioritise care appropriately until help arrives*
    - *Work within your scope of practice*
    - *Inform the parent and the child of the situation*

Show 'Paediatric Anaphylaxis' Part 2 (5mins and 15 sec)

Suggested questions for part two;

When we look at the elements of Communication, Teamwork and Leadership, how was this portrayed differently when compared to the first video?

Facilitator discussion points

- *Tone of the language was calm*
- *The was a clear team leader who used names to ask for specific tasks to be done*
- *The parent was included and involved in the discussion and plan of care*
- *Team members worked together and there was no blame*

What was the communication between the team and the parent like?

Facilitator discussion points

- *Team leader introduced herself to the parent*
- *She spoke with the parent about the child's past history*
- *The Dr spoke with the child and directed some questions to him*
- *The parent was reassured by the team and the Dr and was informed of the diagnosis made by the Dr and what treatment was necessary*
- *The team incorporated Family Centred Care principles by including the parent and the child on all the processes and the plan following*

How did the improved communication with the patient and the parent improve the outcomes of the patient?

Facilitator discussion pints

- *By talking to the parent the Dr was able to determine that the patient has significant allergies*
- *The Dr could then focus on what may have caused the child to begin to deteriorate*
- *The team was able to initiate treatment to the child quickly which halted the deterioration*
- *The calm approach to the situation helped keep the parent involved in the care of his child which in turn kept the child calm*

What was the communication within the team like?

Facilitator discussion points

- *The team communicated well with each other*
- *The communication was polite and calm using the closed loop technique*
- *The team members listened to each other and there was no talking simultaneously*

Was there an effective team leader?

Facilitation discussion points

- *Yes, there was an identified team leader, this was established shortly after the team arrived*
- *The team leader spoke calmly and clearly*
- *The team leader used names to ask for tasks to be done*
- *The team leader listened to other members of the team*
- *The team leader communicated with and listened to the parent*

How did this influence the outcome of the child?

Facilitator discussion points

- *A quick diagnosis was made and treatment initiated before the child deteriorated further*
- *The child and the father were aware of the process and what treatment was being initiated*
- *The child and the parent were reassured throughout the whole process which then allowed for them to remain calm and well informed*
- *The child and the parent were aware of the plan following the event*

The Zin Obelisk Team Building Game:

This Game is played ideally with 6 participants.

Participants are seated in a circle preferably around a table.

Time allocation: 20 minutes to play the game. 10 minutes to debrief the game.

Equipment:

- Paper and pens and a white board and markers.
- Zin Obelisk cards.
- Zin Obelisk Group Instruction Sheet.

Learning Objectives:

- Understand the importance of communication in a team. environment with a focus on sharing and receiving information.
- The process of working as a team when faced with a novel clinical situation.

Questions to ask prior to commencing the game

Prior to commencing the game ask the group what they can remember learning from playing the ball game and watching 'The Surgeon' and 'Met Call in Focus'.

- Communication: use of names, closed loop communication, the impact that language can have on a team.
- Team Leader: roles and responsibilities, impact of task focus vs situational awareness.
- Teamwork: we are all responsible for each other, task allocation.
- Patient centred care.

Introduce the game:
Prior to playing the game it is important to introduce the game and the learning objectivise to the participants. Do not specifically direct the participants to use the paper or whiteboard – this will be part of their discovery or your debrief.

Suggested introduction.

'As a team you are now going to play the game Zin Obelisk. You will be presented with a novel task that as a team you must solve. You have 20 minutes to complete the task. You can use any of the resources provided

in the room.'

How to play the game / rules:

1. Have the group sit together in a circle preferably around a table if one is available.
2. On the table place the Zin Obelisk Instruction sheet with the writing material. Read out the instructions to the group as well.
3. Evenly (or as close to as possible) distribute the Zin Obelisk cards to each members of the group.
4. Nobody in the group is allowed to gather the all the cards in front of them. Everyone should keep their cards to themself. You can only share what's written on your cards verbally.
5. The task of the team is to determine on which day of the week the obelisk was completed.
6. The team has 20 minutes to come to a conclusion.
7. You can use any of the equipment found in the room.

Zin Obelisk Instruction Sheet

In the ancient city of Atlantis, a solid, rectangular obelisk, called a Zin, was built in honour of the goddess Tina.
The structure took less than two weeks to complete.
The task of your team is to determine on which day of the week the obelisk was completed.
You have twenty minutes for this task. Do not choose a formal leader.
You will be given cards containing information related to the task.
You may share this information orally, but you may not show your cards to other participants.

Questions to ask after the game – don't confirm the correct answer until after the debrief

On a scale of 1 to 3 how confident are each of you with the teams answer? 1 is not confident, 2 reasonably confident and 3 very confident. What influenced your level of confidence? Go around the room and ask each member.

Facilitator discussion points

- *Discuss if the role/ contribution by each participant influenced individuals level of confidence. Those that can see or do the calculations tend to be more confident in the answer.*
- ***Clinical relevance:** In a resuscitation does your role influence your level of confidence in the treatment of a child? You can touch on task focus vs situational awareness. If you are focused on a task such as delivering cardiac compressions and relying on your team to make the appropriate clinical decisions.*

What strategies did you use as a team to accomplish the task?

Facilitator discussion points.

- *Role of a team leader in a novel task: team leader can coordinate how information is shared amongst the team, can refocus the group if they are getting off topic.*
- *Communication: Sharing of information in an organized manner,*

the use of recapping what information has been received to make sure that the information is correct and all team members know where the team is up to.

- ***Clinical Relevance:*** *The roll of a team leader in a novel task, coordination, refocusing the group by recapping where the care of the patient is currently at. Discuss how information is shared amongst team members in a resuscitation to ensure that all important information is heard.*

How were the resources provided in the room utilised and how did this alter the team's confidence in their answer?

Facilitator discussion points.

- *Appropriate resource utilisation. Using the resources available in the game eg the white board as well as paper and pens. White board allows everyone in the group to see the information and calculations. If the information was written on paper that only a couple of members could see the rest of the team may not be as confident in the answers.*
- ***Clinical Relevance:*** *Discuss the importance of appropriate resource utilisation in a resuscitation. This applies to people and equipment. An example may be that in a resuscitation information is shared with the team on a white board at the head of the bed which contains the patient's weight that the weight and drug calculations so that the entire team can see the required information. Choosing the right person with the appropriate skill in the team for each task.*

What challenges did you face in completing the task?

Facilitator discussion points.

- *Discuss if a member of the team kept important pieces of information to themselves such as the fact that the team had religious duties to perform and the impact that this had on the team's ability to complete the task.*
- *Discuss if the group became focused on irrelevant information and the impact this had on the team.*
- ***Clinical Relevance:*** *In a resuscitation it is important to share your knowledge of the patient including results and observations. When sharing this information closed loop communication can be effective to ensure that you are clearly heard and that the information has been interpreted correctly.*

How was information shared with the group? What impact did this have on the task?

Facilitator discussion points.

- *Discuss the benefit of a structured approach to communication. It allows all of the information to be shared and everyone hears the information.*
- *If there was no structured response and information was shared in a 'free for all' discuss how this affected the team work – did people feel that they were not being listened to or ignored? This approach may also slow down the task being completed in the allocated time.*

	Clinical Relevance: • *In a loud environment where multiple people talk at once it is possible that key information e.g. Blood results may be missed or not heard.* • *Discuss the importance of closed loop communication to ensure that the information exchanged is understood and correct.* • *Can relate to ISBAR as a structured approach of sharing information.* Ask each member of the group what is one thing they learnt or observed about themselves or teamwork by playing this game and how this game might relate to a resuscitation. **Once you have debriefed the game then tell the group the solution to the game.** **Summary of the Game** **Solution** The answer is **Neptiminus**. The dimensions of the Zin indicate that it contains 50,000 cubic feet of stone blocks. The blocks are 1 cubic foot each; therefore, 50,000 blocks are required. Each worker works 7 schlibs in a day (2 schlibs are devoted to rest). Each worker lays 150 blocks per schlib, therefore each worker lays 1050 blocks per day. There are 8 workers per day; therefore, 8,400 blocks are laid per working day. The 50,000th block, therefore, is laid on the sixth working day. **Since work does not take place on Daydoldrum, the sixth working day is Neptiminus.**	
	Sea Patrol – A Brilliant Career **Acknowledgements** These videos are taken from a commercial television series called 'Sea Patrol'. The segments are edited and distributed with the permission of McElroy All Media. **Questions to ask prior to watching the videos'.** What do you remember learning from previous RESUS4KIDS courses on teamwork, leadership and communication? • Communication: use of names, closed loop communication, the impact that language can have on a team. • Team Leader: roles and responsibilities, impact of task focus vs situational awareness. • Teamwork: we are all responsible for each other, task allocation. • Patient centred care. This year in RESUS4KIDS we are going to explore the concept of graded assertiveness. **Learning Objectives**	**30 minutes**

By the end of the 30 minute session participants will be able to:

- Understand the importance of 'speaking up' in order to ensure patient safety.
- Identify the 4 stage approach to graded assertiveness
- Demonstrate the use of graded assertiveness using a clinical scenario.

Graded Assertiveness

Question to ask participants: What do you understand about Graded Assertiveness?

Facilitator discussion points.

- *It can be challenging to speak up if you identify a patient safety issues especially if it is a senior member of staff that you are challenging.*
- *Graded assertiveness is a process that can be used to help you speak up if you are concerned about the care of a patient or identify a potential mistake.*
- *There are four elements to graded assertiveness and the aim is to start at the lowest level possible and then work your way up the chain based on the response received.*

PACE approach to Graded Assertiveness

PACE approach

Probe	"do you know that…?" or express your concern using an 'I' statement, "I am concerned about . . . "
Alert	(offer an alternative) – "Can we re-assess the situation…?" "Would you like me to . . ."
Challenge	"Please stop what you are doing while..." or ask for an explanation, "It would help me to understand . . ."
Emergency	"STOP what you are doing!" or "For the safety of the patient we need to .....now."

Example:

A clinician about to start feeding via an NG tube without confirming acidic gastric aspirate.

Probe: "Have we confirmed the tube is in the stomach?"

Alert: "We need to ensure the tube is in the stomach rather than the lungs. Did you get acid contents on the pH paper?"

Challenge: "I am concerned that we haven't confirmed that the NG tube is in the stomach and we shouldn't be feeding until we

	have as I am worried the patient may get feed into their lungs." Emergency: "Please stop what you are doing immediately. I am concerned that you may be harming the patient. I am going to get help." **Introduction to videos:** ***"****You are now going to watch 3 short videos taken from the TV show Sea Patrol. These videos demonstrate the different stages of graded assertiveness as well as a number of teamwork, leadership and communication points. After each video we are going to discuss what you have seen and how this applies to the clinical environment."* **Show the first section of the sea patrol video.** **Questions to ask after the first video.** How did you see graded assertiveness demonstrated in this video? *Facilitator discussion points.* - *The captain of the boat suggested that the crew take the boat through uncharted waters.* - *Probe: A concern was raised by the navigator saying that the course requested went through uncharted waters. Formal protest was recorded in the ships log.* - *Alert: An alternative was provided that extra crew would be put on the lookout.* How could this scenario relate to the clinical environment? *Facilitator discussion points.* - *A team leader could suggest an unprecedented procedure or course of treatment for a patient that goes against the organisations policies and guidelines.* What was the communication like in this video? *Facilitator discussion points.* - *Communication was sarcastic, belittling and loud which can create an intimidating environment to speak up in.* - ***Clinical Relevance:*** *communication including language, tone and volume can have significant influence on the team environment and how 'safe' a team member feels to raise their concerns. These elements can intimidate the team. To ensure we create a 'safe' team environment in a resuscitation we need to be aware of how we communicate with our team members, especially our non-verbal cues.*	

How was teamwork demonstrated in this video?

Facilitator discussion points.

- The co-captain supported the navigator by also recording her formal protest in the ships log.
- **Clinical Relevance:** If you agree with a concern raised by one of your team members in the clinical environment speak up and back them up as this will increase their confidence to know that they have support of other team members. You should also document your concerns in the patient note's if relevant.

Questions to ask after the second video

How did you see graded assertiveness demonstrated in this video?

Facilitator discussion points.

- *The previous attempts to raise the crew's concerns over the course requested by the captain were ignored.*
- *Challenge: The captions orders to fire the guns were directly challenged by the first officer who told the gunman, 'do not touch that trigger.'*

How did the first officer try and talk with the captain at first?

Facilitator discussion points.

- *Asked the captain to talk privately. This shows that the first officer still tried to show respect to the captain and tried to move the conversation away from the rest of the crew to a more appropriate place.*
- ***Clinical Relevance**: If you do need to progress to this level of graded assertiveness if it possible try and talk with the person one on one as this is not a conversation to have in front of a group if it can be avoided.*

What was the communication like in this video?

Facilitator discussion points.

- *Loud, demanding, assertive, degrading.*
- ***Clinical Relevance:** Reinforce that communication including language, tone and volume can have significant influence on the team environment and how 'safe' a team member feels to raise their concerns. These elements can intimidate the team. To ensure we create a 'safe' team environment in a resuscitation we need to be aware of how we communicate with our team members.*

Questions to ask after the third video

How did you see graded assertiveness demonstrated in this video?

Facilitator discussion points.

- Emergency: The first officer took control of the ship and relieved the captain of his duties.

How was teamwork demonstrated in this video?

Facilitator discussion points.

- *The crew support the first officer and stood beside her. It was once that the first officer realised that she had the support of the crew she was then confident to step forward and directly challenge the captain.*
- ***Clinical Relevance:** Reinforce the importance of supporting your team member if you agree with the concern that they have raised. It may give them the courage they need to step up and take control of a dangerous situation.*

Practical Exercise

Now that participants have seen an example of how to use graded assertiveness they now have an opportunity to practise the levels of graded assertiveness using a scenario.

Feel free to make up a scenario relevant to your own working environment or use one of the provided scenarios below:

Scenario 1

'It is a busy shift and you are team nursing with another registered nurse. The other nurse has put down a nasal gastric tube which she measured prior to insertion however was unable to aspirate any stomach content. This registered nurse feels confident that they have placed the tube in the correct position and are now planning on administering a patient feed through the NG tube despite not being able to confirm placement. '

Instructor: Ask different member of the group to respond to this scenario using the different levels of graded assertiveness. Example responses are provided.

Using the different stages of graded assertiveness identify your concern to the other RN starting with stage 1: Probe.

Example of a response for level 1: I am concerned that you have been unable to confirm placement of the NG tube and are about to commence a patient feed using the NG.

Instructor to state: The other RN dismisses your concerns saying that they correctly measured the NG tube prior to insertion and they feel confident that it is in the correct place. What is an example of a response for grade 2?

Example of a response for level 2: Before we administer this patient feed via the NG tube we should ask for an x-ray to confirm the tube in the

correct place.

Instructor to state: The other RN responds that you are both busy and doesn't want to waste her or the admitting doctor's time with arranging an x-ray. She continues to prepare the feed to administer via the NG tube. What is the next thing you could say?

Example of a response for level 3: Please stop preparing the feed until we can firm correct placement of the NG tube via an x-ray.

Instructor to state: The other registered nurse still does not want to ask for an x-ray to confirm that the NG tube is in the correct place and continues to prepare to hang the patient's feed. What is the next thing you could say?

Example of a response for level 4: Stop what you are doing. For the safety of this patient I am going to contact the admitting team to request for an x-ray to confirm the placement of this NG tube before anything is administered.

Scenario 2

'You are working as part of the arrest team caring for a patient who is in Pulse Electrical Activity (PEA). The team leader has followed the COACHED approached and the defibrillator is charged and ready to deliver a shock. The team leader has asked for the shock to be given. You are concerned that this is the incorrect management as the patient is in a non-shockable rhythm.

Instructor: Ask different member of the group to respond to this scenario using the different levels of graded assertiveness. Example responses are provided.

Using the different stages of graded assertiveness identify your concern to the team leader starting with stage 1: Probe.

Example of a response for level 1: Don't deliver the shock right now; is the patient in a shockable rhythm?

Instructor to state: The team leader dismisses you saying that the patient is in arrest and therefore requires a shock.

Example of a response for level 2: I am concerned that the patient is in a non-shockable rhythm and therefore does not require defibrillation.

Instructor to state: The team leader again dismisses your concern.

Example of a response for level 3: The patient appears to be in PEA which is a non-shockable rhythm. The Australian Resuscitation Council Guidelines do not recommend a shock for patients in this rhythm. Can you explain to me why you want to shock the patient please?

Instructor to state: The team leader does not answer you and is again asking for the patient to receive the shock.

	Example of a response for level 4: Stop what you are doing. For the safety of this patient I am going to take over the team leader role. We need to proceed down the non-shockable pathway for this patient. **Note**: After discussion make sure participants are aware of correct defibrillation safety.	
	Wrap up Emphasise that the attributes discussed in these activities are applicable to health care / resuscitation events. Identify to participant that in the clinical scenarios that they are about to participate in they will have the opportunity to put into practise these different teamwork, leadership and communication activities. Summarise the objectives of the teamwork & communication component of the course.	

	Scenario based teaching Move participants in to groups of six people. Each pre-assigned group will ideally have an interdisciplinary component as well as a varied experience level.	
Introduction to scenario based teaching	Suggested introduction *'For the 60 minutes we are going to run through 3 clinical scenarios. In these scenarios you are going to have the opportunity to put into practice all of the clinical skills that you were introduced to or refreshed with in the e-Learning. In these scenarios we will be following the DRSABCD approach to a collapsed child. All of the equipment that you need for the scenarios is on the table so please don't tell me that you are going to do something rather pick up the equipment and show me using the manikin. There is no test today. Today is about practise.'* Note: You may also wish to talk through the COACHED approach to defibrillation for groups that are unfamiliar with this.	
Introduction to the scenario	Instructor will: • Outline the **pause-and-discuss** format, Real time may be suspended, slowed or fast tracked at appropriate intervals as we pause to discuss learning points. • **GREY SHADED AREAS IN THE LESSON PLAN ARE TO BE PAUSED AND DISCUSSED WHITE BOXES ARE SKILLS TO BE DEMONSTRATED AS INDICATED.** • Remind participants that this is a chance to consolidate what they have learnt in their e-learning, it is not new information. • Discuss that there will be three scenarios, the first taking around 45 minutes as everyone will demonstrate the life support skills. • Provide responses to the learner's questions about the case scenario. • Provide specific information about the case as it progresses. Participants must follow DRSABCD: D Danger R Response S Send for Help A Airway B Breathing C Circulation / compressions D Monitor / defibrillation As the instructor, you will state: 'I will describe a scenario of a child who is critically ill. As you assess the child and evaluate interventions, I will give you additional information'. Use the expression 'OK, the patient is not going to get better or worse….' When you pause to discuss a point. This is a manikin, it is plastic, it can be ventilated using a bag and mask and compressions can be done. A Guedel airway can be inserted, otherwise you need to ask if you need to know anything else.	**4 minutes**

	For the purpose of this scenario I want you to suspend disbelief and treat the manikin as a real child.	
Suggested technique for small group skill practice	Round the table teaching method which is described in detail above in this manual.	
Note for instructors	It is important that, by the end of the session at least, every participant has met the learning objectives and demonstrated: • Managing an infant or child's airway. • Performing effective breathing. • Performing effective cardiac compressions. • Recognition and initial management of shockable and non-shockable cardiac rhythms. • Demonstrate a knowledge of safe defibrillation. **None of the 'children' in the RESUS4KIDS practical course die, they all recover after receiving treatment!**	

Scenario One

Ventricular Fibrillation **Approximate Time: 40 mins**

John, an 11-month old (10 kg) arrives in the emergency department waiting room with his grandparents after collapsing in the car. His grandmother had decided to bring in her grandson as he has had a mild viral illness for the past few days. However, on the journey he collapses.

or

John, an 11 month old (10 kg), was admitted to the paediatric ward last night after becoming momentarily unresponsive at home. His initial work up had been unremarkable and he was admitted for observation of a possible first seizure. You are filling in paper work at the desk when John's mother comes to you and says he doesn't look well.

or

Pre hospital or Community Healthcare staff.

You are called to an 11-month old boy (10 kg), who has been unwell for a few days. On arrival you find the patient is now collapsed. The bystanders, his grandparents, state that John has had a mild viral illness for the past few days.

DRSABCD Step	Expected steps by participants	Instructor Prompt	Time
Participant 1 **Action Step** **DANGER**	Participant to assess for danger.	What type of dangers may you come across is your work environment? • Thinking about external dangers e.g. cords, spills, equipment, other people.	1 min
Participant 1 **Discussion** **DANGER**	**Questions to ask the participants.** **Instructor discuss:** What dangers do patients pose to health care rescuers? What do we do to minimise these risks?	• Blood. • Respiratory secretions (PPE). Health care rescuers who are managing the infant/child's airway should be wearing a mask and goggles to protect them from airborne viruses. All other members of the team should at least be wearing gloves. **THERE IS NO DANGER**	

Participant 2 **Action Step** **RESPONSE**	Assess for response.	**A participant to demonstrate assessing response**: Tactile gentle rub of the shoulder and verbal stimulus, e.g. 'John can you hear me?'	1 min
Participant 2 **Discussion** **RESPONSE**	**Questions to ask the participants.** What type of response would you expect from an infant or child?	• Eye opening. • Cry. • Verbal response. • Movement. **THE CHILD IS UNRESPONSIVE.**	
Participant 3 **Action Step** **SEND FOR HELP**	Send or call for help.	Participant to state hospital emergency response number and other methods of calling for help specific to their work area.	2 mins
Participant 3 **Discussion** **SEND FOR HELP**	**Questions to ask the participants.** How do you send for help **in your hospital**? Do you need to provide any specific information when calling a paediatric arrest? When do I call for help if I witness the patient arrest?	• Emergency Number. • MET team. • Buzzers / call bell. • Phone by bedside. Stating that it is a paediatric arrest, location of the arrest. A rescuer witnessing a sudden collapse should obtain help immediately and then start CPR. A single rescuer encountering an unwitnessed collapse of an infant or child should start CPR immediately and then obtain assistance. **Note:** If you have people from different clinical areas in the same group that have different methods for calling for help discuss this with the group. **HELP IS ON THE WAY.**	
Participant 4 **Action Step** **AIRWAY**	Assess the airway. Clear the Airway. Maintain airway.	**THE AIRWAY IS OBSTRUCTED.** Use a Yankauer sucker to clear secretions or vomit. Place the infant in the neutral position.	2 mins

	Demonstrate manual manoeuvres to open the airway. Airway adjunct.	• Chin lift. • Jaw thrust. Size and insert an oropharyngeal airway.	
Participant 4 **Discussion** **AIRWAY**	**Questions to ask the participants.** How would you clear the airway?	• Use a rigid Yankauer sucker. • Do not do blind finger sweeps because a young child's airway is funnel-shaped and there is a risk of pushing an object further down the airway.	
	What position do you place an infant in to maintain an open airway?	Neutral position: a good way to achieve this is to place a towel or thin blanket (approximately 1.5cm in thickness) under the infant's shoulders. Do not delay CPR if you are unable to easily locate a towel of blanket.	
	How do you measure an oropharyngeal airway? How do you insert an oropharyngeal airway?	Measure from centre of the patient's mouth to the angle of the jaw. Insert an oropharyngeal airway using a tongue depressor or laryngoscope blade. Insert right way around, DO NOT insert upside down and twist as this can cause trauma to the soft pallet.	
	Further information that can be used if the discussion points arise. What is different about infant's airways?	Obligate nasal breathers in the first several months of life therefore may need to clear nose as well.	
	How do you insert a nasopharyngeal airway?	Measure from the tip of the nose to the tragus of the ear. Lubricate well. Insert through nostril aiming 'straight back' not upwards.	

	When would you use one? When wouldn't you use one?	Seizures, dental / oral trauma, swelling to mouth. Suspected head injury / trauma/ base of skull fracture.	
All participants **Action step** **AIRWAY**	Neutral position. Chin lift. Jaw thrust. Size and insert an oropharyngeal airway.	Each participant now takes it in turn to demonstrate each of these skills.	8 mins
Participant 5 **Action Step** **BREATHING**	Assess for breathing : • Look / listen / feel. Demonstrate how to use a pocket mask or an adult sized face mask for an infant. Demonstrate how to bag mask ventilation.	Participant to demonstrate assessing breathing by placing their ear over the infant's mouth and nose while looking for adequate rise and fall of the chest for 10 seconds. It is vital that participants maintain an airway opening manoeuvre while assessing and giving breaths. Failure to maintain head tilt and chin lift is the most common cause of obstruction during resuscitation. **THE CHILD IS UNRESPONSIVE AND NOT BREATHING NORMALLY.** For an infant or child a pocket/ face mask is used 'upside down' to ensure a proper seal. Note: Ensure that participant doesn't actually blow into the mask. Ensure participants choose the correct size mask to ensure an adequate seal and the lungs are inflated.	2 mins
Participant 5 **Discussion** **Breathing**	**Questions to ask the participants.** What factors do we need to ensure when using the self-inflating resuscitation bag? How much do you squeeze the bag? How long is inspiration vs expiration when bagging a	• Good seal. • C grip. • Attach 0_2 where possible. • Inflate reservoir bag ideally before commencing. • Tidal volumes are 5-7 mL/kg. Just enough to make the chest rise. Inspiration 1 second, expiration 1 second. Note – expiration with Bag and	

	patient?	mask is passive.	
	What are some of the potential complications of over inflating the chest?	• Stomach full of air which can lead to aspiration and splinting of the diaphragm. • Pneumothorax. • Raised intrathoracic pressures also reduce venous return.	
	What do I do if I don't have equipment to give breaths to the patient?	If you do not have access to a pocket mask or bag and mask to give the patient breaths you should start compressions until help arrives with the resuscitation equipment.	
	Further information that can be used if the discussion points arise.		
	What is the pop off valve there for?	Prevent excess pressures being delivered.	
	Discuss the option of two-handed bag and mask.	Some participants find it easier for two people to do the bag and mask ventilation. This involves one person ensuring a good seal of the mask with the other person squeezing the bag.	
	These are the weight recommendations for various manufacturers of resuscitator bags Weight ranges are based on mask sizes provided with the bags as well as volume of the bags themselves.	**Laerdal The Bag II Disposable Resuscitators** Size: Adult / Child / Infant Volume (mL): 1600 / 500 / 230 Weight range: > 20 kg / 10-20 kg / 2.5-12 kg **Laerdal Reusable Silicone Resuscitators** Size: Adult / Child / Preterm Volume (mL): 1600 / 600 / 240 Weight range: >20 kg / 2.5-20 kg / < 2.5 kg **Mayo Disposable resuscitators** Size: Adult / Child / Infant Volume (mL): 1500 / 500 / 280 Weight range: >23 kg / 6.5-23 kg / < 6.5 kg	
	In a patient that is intubated or has an LMA what is the rate of ventilations?	10 breaths per minute.	

All Participants **Action Step** **BREATHING**	Give two effective rescue breaths.	Each participant is to now take it in turn to demonstrate giving two effective rescue breaths. **Instructor note: Once each of the participants have demonstrated giving two rescue breaths ask participant 5 to return to giving rescue breaths as participants will now work in pairs to ensure the correct ration of 15:2.**	5 mins
Participant 6 **Action Step** **CIRCULATION**	Assess for circulation by feeling for a pulse. Participant to commence cardiac compressions.	Participant to demonstrate where they would check for a pulse in an infant (femoral or brachial). **THERE IS NO PULSE.** Participant should start cardiac compressions at a ratio of 15:2 working with participant 5 who is providing bag mask ventilation. Assess participant for • Correct rate. • Correct depth. • Allow full recoil. • Correct landmarks. • Correct hand positioning. • Correct ratio. ***NOTE: chest compressions should be commenced in an infant if a pulse is not palpable, or is less than 60 beats per mins or cannot be identified within 10 seconds and the patient is unresponsive and not breathing normally.***	2 mins

Participant 6 **Discussion** **CIRCULATION**	**Questions to ask the participants** Where do you feel for a pulse?	• Brachial. • Femoral. • Carotid (not good for infants due to chubby neck). **Note**: Suggest to participants that they should practice feeling femoral and brachial pulses in infants in their clinical practice. If they are unable to feel pulses in children who are obviously alive, then they should not rely on a pulse check in a collapsed child. Link to appropriate task allocation.	
	How long should you feel?	No longer than 10 sec.	
	What rate per minute of compressions should you aim for?	100 -120 per minute.	
	How far down do you compress?	1/3 of the depth of the chest (approximately 5cm in children and 4cm in infants).	
	Where do you position your hands on the chest?	Lower half of the sternum, equates to the centre of the chest.	
	What are the different techniques you can use to deliver cardiac compressions?	Two hands encircling / two fingers, one hand / two hands. 15 compressions : 2 ventilations (two health care rescuers).	
	What are the benefits of the hand circling technique?	The literature would support that in small infants the hand encircling technique provides better quality chest compressions. This is the recommended method for giving chest compressions to an infant in a healthcare environment where there are two rescuers.	
	How often should we change over?	Recommended to change rescuer every two minutes to reduce fatigue and maintain efficacy of compressions. ***Remember:*** *It is essential to provide effective cardiac compressions so push hard, push fast, release and don't interrupt.* **Note:** Instructors should consider recording beat at 100-120 BPM off the e-learning to reinforce compression rate.	

All Participants **Action Step** **CIRCULATION**	Demonstrate effective cardiac compressions and bag mask ventilation at the ratio of 15:2.	Participants are to now work in pairs taking it in turn to demonstrate effective cardiac compressions and bag mask ventilation at the ratio of 15:2.	6 mins
Note for instructor about defibrillation practice	***The majority of healthcare facilities when responding to a child or infant that is not breathing and has no pulse will immediately place defibrillation pads on the patient. If this is how your facility responds in these circumstances then you need to follow the C.O.A.C.H.E.D. approach no matter what rhythm the child is in.*** ***For some facilities the first response is to place ECG leads on an infant or child that is not breathing or has no pulse. In this instance you will continue to care for the patient, pausing CPR every 2 minutes to assess the patient's rhythm. If the infant/ child does go into a shockable rhythm then the defibrillator pads are attached to the patient and the C.O.A.C.H.E.D. approach is followed.*** ***As an instructor teach the approach that your facility expects your staff to follow.***		
All Participants **Action Step** **DEFIBRILLATION / MONITOR**	Attach the defibrillator pads while CPR continues and follow the C.O.A.C.H.E.D. approach. Allocate one person in charge of the defibrillator. **C**ompressions Continued. **O**xygen that is free flowing away. **A**ll else clear. **C**harge the defibrillator to 4J/kg. **H**ands off for compressions. Compression person to respond, 'I'm safe'. **E**valuate rhythm - The infant is in VF. **D**eliver the first shock. **1st shock delivered.**	Place pads using the front-back position (anterior-posterior) or in the conventional anterior position on an older child.	3 mins

All Participants **Discussion Step** **DEFIBRILLATION**	**Questions to ask the participants.**		
	How do you recognise VF?	• Irregular rhythm – the waves demonstrate the fibrillating action of the heart. • Variable size broad complexes – the waveform appears as peaks and troughs with varying heights and spaces between them.	
	Where do you place pads for an infant?	Pad placement: use the front-back position anterior-posterior. To do this place one pad on the upper back between the shoulder blades and the second pad on the front of the chest, if possible slightly to the left. Once the pads have been attached it is important to allocate one person the role controlling the defibrillator. On an older child you can use the conventional 'adult' position.	
	What do you do if the defibrillator does not have the specific joules you require?	When defibrillating round up the joules if specified dose not available, i.e. 40 joules would become 50 joules. In this child who weighs 10 kg they would require 4 J/kg =40 J this rounds up to 50 J.	
	Further information that can be used if the discussion points arise.		
	When to change from adult to infant size pads?	Medtronic Lifepak 20 changes from paediatric to adult pads at 15 kg. Zoll Pedi Padz 2 are used in children less than 25 kg. Phillips MRx has a 10 kg weight limit for the paediatric pads. **It is essential that instructors are familiar with their facilities defibrillator and pad sizing.**	
	When should you assess the rhythm after delivering a shock?	After a further 2 minutes of CPR. *The chance of developing a rhythm associated with an output is very small in the first minute or so after a DC shock. Starting CPR immediately restores blood flow to the brain and heart and creates a milieu more conducive to the return of spontaneous circulation. Effective CPR has been shown to increase the success of subsequent defibrillation* **Remember:** have knowledge of safe	

		defibrillation because defibrillation is everybody's business and early defibrillation saves lives! The ARC recommends the first option for defibrillation of a child is a manual defibrillator. If one is not available the second option is an AED with a paediatric setting for children under the age of 8. Children over the age of 8 can be defibrillated using a standard AED. If there is only a standard AED available this can be used on a child under the age of 8.	
	Can you use an AED on a child if you do not have access to a manual defibrillator?		
All Participants **Action Steps** **SCENARIO Continue**	**Immediate Recommence CPR.**	Immediately after the first shock has been given one participant is to return to giving bag mask ventilation and another to give chest compressions – Start with the chest compressions. Note: The person giving compressions should be changed every 2 minutes.	3 mins
	Establish IV Access.	The 2 minutes between delivering the 1st and 2nd shock is the time for participants to gain IV/IO access. During this 2 minutes of CPR is the time to draw up the dose of adrenaline.	
	Adrenaline.	For this infant the dose of adrenaline in 10mcg/kg x 10kg = 100mcg . Or 1ml of 1:10,000 adrenaline.	
	COACHED approach. **C**ompressions Continued.		
Coming up to 2 minutes prepare for rhythm check	**O**xygen that is free flowing away. **A**ll else clear. **C**harge the defibrillator to 4J/kg. **H**ands off for compressions. Compression person to respond, 'I'm safe'. **E**valuate rhythm - The infant is in VF. **D**eliver the second shock. **Deliver 2nd Shock.** **2nd SHOCK DELIVERED.**	Participants to demonstrate safe defibrillation practice while delivering the 2nd shock. **THE INFANT IS STILL IN VF.**	

All Participants **Discussion** **Scenario Continued**	**Questions to ask the participants.** How long do you have to gain IV access in a resuscitation? What is the dose of Adrenaline? **Further information that can be used if the discussion points arise.** How do you calculate child's weight?	In a resuscitation you have 60 seconds 2 attempts to gain IV access – whichever occurs first before you insert an IO. 10mcg/kg IV or IO. APLS Formulas 0-1 year = (0.5 x age in months) + 4 1-5 years = (2 x age in years) + 8 6-12 years = (3 x age in years) + 7 Best Guess Formulas 0-11 months = (Age in months+9) / 2 1-4 years = 2 x (Age +5) 5 -14 years = 4 x Age	
All Participants **Action Steps** **SCENARIO Continue** **Coming up to 2 minutes Prepare for rhythm check**	**Immediate Recommence CPR.** **Adrenaline Administered.** **Continue CPR for 2 minutes.** **Amiodarone.** **COACHED approach.** **C**ompressions Continued. **O**xygen that is free flowing away. **A**ll else clear. **C**harge the defibrillator to 4J/kg. **H**ands off for compressions.	Once the 2nd Shock has been delivered the participants should immediately recommence CPR. The dose of adrenaline that was prepared earlier is to now be given with a flush of 0.9% Sodium Chloride. **Instructor to change rhythm card to sinus rhythm.** During this 2 minute cycle participants to prepare Amiodarone dose. 5mg x 10kg = 50mg Ampoules 50 mg/mL Amiodarone to be drawn up in 5% Dextrose	3 mins

	Compression person to respond, 'I'm safe'. **E**valuate rhythm - The infant is in a non-shockable rhythm. **D**ump or disarm the defibrillator. Feel for a pulse – a pulse is present.	**The infant is now in sinus rhythm. Participants must confirm this by assessing the patient for a pulse which is present. The infant is now starting to breathe on its own.** **END SCENARIO.**	
All Participants **Discussion** **Scenario Continued**	**Questions to ask the participants.** When do we consider Amiodarone? What is the dose of Amiodarone? **Further information that can be used if the discussion points arise.** What type of drug is Amiodarone? What does the IV line need to be flushed with before and after the Amiodarone is given?	After the 3rd shock. 5 mg/kg IV / IO. Amiodarone is an antiarrhythmic drug effective for adult shock resistant VF and more effective than lignocaine. It has been used to treat paediatric life-threatening arrhythmias. 5% dextrose flush pre and post administration. Dilution must be in 5% Dextrose. It is incompatible with 0.9% sodium chloride.	

END OF SCENARIO

You should now summarise the main teaching points of the shockable pathway and the COACHED approach.

Scenario Two

Choking Child — Approximate Time: 5 mins

You are working in the emergency department / paediatric ward (use one) looking after a one year old boy who has gastroenteritis. He has successfully completed his trial of oral fluids but he now seems unhappy after eating a small lolly. Instructor holds manikin in own arms gives manikin to one participant stating **– 'I think he has inhaled a lolly. Can you help him?**'

or

Pre hospital or Community Healthcare staff.

You are picking up your lunch at a café. A small child is sitting with his family near where you are waiting for your meal. He is eating a lolly. He waves at you, you smile and turn away.
You feel a tap on the shoulder and turn - Instructor holds manikin in own arms gives manikin to participant's stating –"I think he has inhaled a lolly. Can you help him?"

Step	Expected steps by participant	Instructor Prompt	Time
Effective cough management	Encourage coughing.	Instructor to make or play downloaded coughing noises, ie effective cough. Alternatively say 'the child has an effective cough'.	1 min
Ineffective cough management	5 Back blows. 5 Chest thrusts. Call for help.	Instructor now makes or play downloaded stridulous noises in between coughing, ie ineffective cough Alternatively say 'the child now has an ineffective cough'.	2 min
Unresponsive cough management	DRSABCD approach.	Instructor now goes quiet – infant now unresponsive. Emphasise not to get stuck on breathing: if unable to ventilate move onto circulation in an unresponsive infant.	2 min
Instructor is to now talk and demonstrate to the group through the different steps of the choking child algorithm. Back blows – aiming between the child's shoulder blades. Chest thrusts – exactly the same as a chest compression just at a slower rate. 1 per second. When to call for help – sooner rather than later. It is better to have help and not need it than to not have help and need it.			
All participants Discussion	How do you encourage a one year old to cough effectively? Back blows/ chest thrusts. What is the difference	There is no correct way to encourage a one year old to cough effectively. The main thing to ensure if the child is kept as calm and comfortable as possible. When giving the child back blows and chest thrust ensure that you use gravity. To do this hold the infant over your knee with their head facing downwards. For an older child or adult place them over a chair, bed, table or bend their head towards their knees.	

	between an effective and an ineffective cough? **Further information that can be used if the discussion points arise.** How many attempts at back blows/ chest thrust will it take to clear the object.	<table><tr><th>Effective</th><th>Ineffective</th></tr><tr><td>• Crying or talking in response to questions. • Loud cough. • Able to take a breath before coughing. • Fully responsive.</td><td>• Unable to cry or talk. • Quiet or silent cough. • Unable to breath. • A bluish colour to skin. • Decreasing level of consciousness.</td></tr></table> This will depend on each individual circumstance. Some people have reported having to do the back blows, chest thrust set multiple times before the object clears. The take home message is while the children is still conscious with an ineffective cough keep performing the back blows, chest thrusts and ensure help is on the way.	

END OF SCENARIO

At the end of this scenario spend a few minutes emphasising the three stages in the management of a choking child.
You can demonstrate the correct management if the participant failed to correctly manage the patient and answer any questions the participant may have.

Scenario Three

Pulseless Electrical activity (PEA) **Approximate Time: 10 mins**

Jodie is a one-year old baby girl (10 kg) who has had a one-day history of fever. Her mother feels she is just not herself and is starting to be less responsive. She calls an ambulance. The ambulance personnel bring her into the ED where, as they hand over to you, the infant seems to be deteriorating rapidly.

or

Jodie is a one year old baby girl (10 kg) who was admitted to the paediatric ward this morning for observation after a first febrile convulsion, presumably of viral cause. Her mother calls you over as she feels she is just not herself and is starting to be less responsive.

or

Pre hospital or Community Healthcare staff.

Jodie is a one-year old baby girl (10 kg) who has been unwell for a few days, reduced oral intake and urine output with high fever. Her mother feels she is just not herself and is starting to be less responsive. She calls an ambulance. Prior to your arrival Jodie becomes unresponsive and pale.

NOTE: Start this scenario with one participant and when they send for help slowly add the others. It is important to make sure that at least one other participant has arrived before compressions to ensure that the correct CPR ratio of 15:2 is maintained.

DRSABCD Step	Expected steps by participants	Instructor Prompt	Time
DANGER	Assess for danger.	**THERE IS NO DANGER.**	1 min
RESPONSE	Assess for response.	**THE INFANT IS UNRESPONSIVE.**	
SEND FOR HELP	Send or call for help.	**HELP IS ON THE WAY.**	
AIRWAY	Assess airway. Open, clear, maintain.	**Jaw thrust, chin lift.** **Suction.** **Airway Adjuncts.** **THE AIRWAY IS CLEAR.**	1 min
BREATHING	Assess breathing. Look, listen, feel. Give two effective breaths.	**THE INFANT IS UNRESPONSIVE AND NOT BREATHING NORMALLY.**	
CIRCULATION	Assess for circulation and / or need for compressions Feel for a pulse.	**THERE IS NO DEFINITE PULSE WITHIN 10 SECONDS.** ***Make sure 2nd participant has arrived to help***	2 min
CIRCULATION **COMPRESSIONS**	Start compressions • Correct rate. • Correct depth. • Allow full recoil. • Correct landmark. • Correct hands. • Correct ratio.	**15 compressions : 2 Ventilations.** **Rate 100-120 compressions per minute.** **1/3 depth of chest.** **Two thumbs encircling.** ***The rest of the group have arrived to help*.**	

Note for instructor about defibrillation practice	***The majority of healthcare facilities when responding to a child or infant that is not breathing and has no pulse will immediately place defibrillation pads on the patient. If this is how your facility responds in these circumstances then you need to follow the C.O.A.C.H.E.D. approach no matter what rhythm the child is in.*** ***For some facilities there first response is to place ECG leads on an infant or child that is not breathing and has no pulse. In this instance you will continue to care for the patient, pausing CPR every 2 minutes to assess the patient's rhythm. If the infant/ child does go into a shockable rhythm then the defibrillator pads are attached to the patient and the C.O.A.C.H.E.D. approach is followed.*** ***As an instructor teach the approach that your facility expects your staff to follow.***		
DEFIBRILLATOR	Allocate one person in charge of the defibrillator. **C**ompressions Continued. **Oxygen** that is free flowing away. **All** else clear. **C**harge the defibrillator to 4J/kg. **H**ands off for compressions. Compression person to respond, 'I'm safe'. **E**valuate rhythm - The infant is in a non-shockable rhythm. **D**isarm and dump the shock. Feel for a pulse – there is no pulse.	Attach the defibrillator pads while CPR continues and follow the C.O.A.C.H.E.D. approach. ***Show laminated defibrillator card with PEA rhythm strip.*** **THERE ARE NORMAL LOOKING COMPLEXES ON THE ECG BUT THERE ARE NO PALPABLE PULSES.** **THE INFANT IS IN PULSELESS ELECTRICAL ACTIVITY.** The characteristics of PEA are recognisable potentially perfusing non shockable cardiac rhythm where no palpable pulse can be found.	1 min
	Continue CPR while establishing IV / IO access. Administer Adrenaline immediately. Flush with 0.9% sodium chloride. Continue CPR Think about reversible causes.	Adrenaline 10 mcg/kg IV / IO 0.1 mls/kg of 1:10,000 1 year old = approx 10 kg Repeated every 2nd cycle (approx every four mins). Give a fluid bolus of 20 mL/kg IV. In this patient this will be 200mL of 0.9% sodium chloride. If signs of shock persist after the first bolus give a second bolus.	1 min

		*For a senior group consider making the BSL 1.8mmol and to have participants give a 10% dextrose bolus at 2.5mLs/ kg.	
Coming up to 2 minutes Prepare for rhythm check	Continue CPR for two mins. Towards the end of the 2 minute cycle demonstrate the C.O.A.C.H.E.D. approach to defibrillation. **C**ompressions Continued. **Oxygen** that is free flowing away. **All** else clear. **C**harge the defibrillator to 4J/kg. **H**ands off for compressions. Compression person to respond, 'I'm safe'. **E**valuate rhythm - The infant is in a non-shockable rhythm. **D**isarm and dump the shock. Feel for a pulse – the infant has no pulse.	Ensure Disarm/Dump prior to pulse check – defib safety. **THERE IS A POTENTIALLY PERFUSING NON SHOCKABLE CARDIAC RHYTHM BUT NO PULSE.**	

PAUSE & DISCUSS Reversible Causes if group has not already started treating reversible causes. If group has already commenced treating reversible causes save this discussion till the end of the scenario.	**'OK, the patient is not going to get any better or worse. Let's discuss Reversible Causes…'** What are the 4 H's and the 4 T's? 1. **H**ypoxia. 2. **H**ypovolaemia. 3. **H**ypo / **H**yperkalaemia, hypoglycaemia metabolic. 4. **H**ypothermia. 5. Cardiac **T**amponade. 6. **T**ension pneumothorax. 7. **T**oxins / poisons. 8. **T**hrombosis – cardiac and pulmonary. What could be some of the most likely causes in this scenario? Discuss the importance of a priority assessment of ruling all of the causes in or out – never assume anything - always assess. What should you be considering at this point in time? Important to emphasise that hypoxia and hypovolaemia are the most common reversible causes. Hypoxia will often improve with bag mask ventilation with oxygen in the majority of cases. Hypovolaemia will often improve with a 0.9% Sodium Chloride bolus at 20mLs/kg. It is also important to discuss hypoglycaemia. Hypoglycaemia needs to be treated unless the blood sugar can be confirmed to be normal. The dose of 10% dextrose is 2.5mLs/kg. '**OK, let's take care of our patient again'….**		3 min
Coming up to 2 minutes Prepare for rhythm check	Continue CPR for two mins. Towards the end of the 2 minute cycle demonstrate the C.O.A.C.H.E.D. approach to defibrillation. **C**ompressions Continued. **O**xygen that is free flowing away. **A**ll else clear. **C**harge the defibrillator to 4J/kg. **H**ands off for compressions. Compression person to respond, 'I'm safe'. **E**valuate rhythm - The infant is in a non-shockable rhythm. **D**isarm and dump the shock.	Note: As in adult practice it's up to the experienced team leader to decide after the first few cycles of a non-shockable rhythm whether to continue with the COACHED approach.	

	Feel for a pulse – ROSC. The infant has a pulse.	**THERE ARE NORMAL LOOKING COMPLEXES ON THE ECG WITH PALPABLE PULSES** This infant will get better once they have received at least one fluid bolus, a dose of adrenaline and oxygen through the bag mask ventilation.	

END OF SCENARIO

You should now summarise the main teaching points of the non-shockable pathway and the COACHED approach. In particular discuss the common causes of PEA such as hypoxia and hypovolaemia.

SPECIFIC CHALLENGES FOR INSTRUCTORS

The delivery of this training incorporates principles ensuring that:

- The content is relevant.
- The learner is actively involved.
- Objectives are clearly set.
- Positive feedback is given.
- Reflection on experience is encouraged.

A participant who may present challenges during the course includes:

Non Talker

'Non-talker' does not necessarily equate to 'non-learner', however some candidates may need additional support. Learners feel more comfortable in familiar situations and if asking direct questions it may be worth relating the question to their individual clinical environment and role for example 'how would you activate an emergency response in your own clinical area'. During scenario allocation consider allocating a less threatening role initially to allow the learner to become more familiar with the expectation. Take turns at asking each person questions or to demonstrate so that one individual does not feel picked on.

Talkers

These learners are usually enthusiastic and keen to show that they have sound core knowledge and as such tend to monopolise the discussion. Approaches that can be used to influence this type of candidate include summarising or asking the candidate to summarise what has been said. Following the summary the discussion can be directed towards another candidate.

It may be difficult to interject while learners like these are talking. To overcome this wait until the talker has to breathe, thank them for their response, rephrase the question and redirect the discussion.
Participants from acute clinical areas may bring in more complex questioning or advanced scenario questioning, this can confuse those participants who do not need this additional knowledge and may also challenge an inexperienced instructor. To manage these groups determine if the questions or comments are relevant to the session objectives and if they are not advise that this session is designed to refresh core knowledge and skills within the allocated time. Specific questions or scenarios related to more advanced life support training whilst relevant are managed back within their clinical area training programs.

Reluctant Learner

Traditionally healthcare providers have been taught within their own disciplines in both the undergraduate and post graduate programs. During medical emergencies these disciplines are brought together and required to work as a team when roles are unfamiliar and the stakes are high. During these emergencies

these teams are working towards a common goal with each team member's contribution progressing the team toward this goal.
The multidisciplinary approach of RESUS4KIDS is a relatively new concept and some individuals may find this challenging to engage in. Often these individuals have good core knowledge and sharing this knowledge would benefit all participants. It is important that the instructor attempts to help these learners use their knowledge constructively.

Satellite discussions between participants rather than with the group as a whole

This can be a disrupting influence and the instructor may choose to stop the main discussion, listen to the satellite one, and link this with the main discussion to bring the group back together. Alternatively use a direct approach and call the individual by name to draw attention back into the discussion.

The Learner with a previous real life experience

These learners have either recently being involved in a paediatric arrest or have in the past been involved in a paediatric arrest and are still affected by their experience. These participants may present as any of the above mentioned challenging learners. These participants may have had a positive experience and can add to the group's discussion. Others may find the content taught in RESUS4KIDS too confronting as it brings back difficult memories. If the course content becomes too much for these people allow them to leave and inform their manager so they can follow up with them.

Participants that struggle during the scenario based teaching

There is no formal assessment during the RESUS4KIDS short practical course however there is process of continuous assessment and feedback by the RESUS4KIDS instructor during the course.
If a member of the group is significantly struggling with the essential skills of RESUS4KIDS (airway manoeuvres, bag mask ventilation and cardiac compressions) this needs to be fed back to the participant with a suggestion that they obtain further training.

Local health districts should establish policies for instructors to follow for poorly performing candidates.

ALTERNATE SCENARIO THREE - CHILD

Pulseless Electrical activity (PEA). **Approximate Time: 10 mins**

Note: To do this scenario you will require a second manikin that is child size as well as additional equipment such as an adult size resuscitator bag, larger oropharyngeal airways and face masks. If you chose to have all members demonstrate the different skills like the first scenario than you will not be able to complete this scenario in 10 minutes, it will be longer. Using this scenario may also reduce the ability of participants to practice what they have learnt from the first scenario.

Jodie is an eight-year old girl (30 kg) who has had a one-day history of fever. Her mother feels she is just not herself and is starting to be less responsive. She calls an ambulance. The ambulance personnel bring her into the ED where, as they hand over to you, the child seems to be deteriorating rapidly.

or

Jodie is an eight year old girl (30 kg) who was admitted to the paediatric ward this morning for observation for a febrile illness, presumably of viral cause. Her mother calls you over as she feels she is just not herself and is starting to be less responsive.

or

Pre hospital or Community Healthcare staff

Jodie is an eight-year old girl (30 kg) who has been unwell for a few days, reduced oral intake and urine output with high fever. Her mother feels she is just not herself and is starting to be less responsive. She calls an ambulance. Prior to your arrival Jodie becomes unresponsive and pale.

NOTE: Start this scenario with one participant and when they send for help slowly add the others. It is important to make sure that at least one other participant has arrived before compressions to ensure that the correct CPR ratio of 15:2 is maintained.

DRSABCD Step	Expected steps by participants	Instructor Prompt	Time
DANGER	Assess for danger.	**THERE IS NO DANGER.**	1 min
RESPONSE	Assess for response.	**THE CHILD IS UNRESPONSIVE.**	
SEND FOR HELP	Send or call for help.	**HELP IS ON THE WAY.**	
AIRWAY	Assess airway. Open, clear, maintain.	**Head in the sniffing position.** **Jaw thrust, chin lift.** **Suction.** **Airway Adjuncts.** **THE AIRWAY IS CLEAR.**	1 min
BREATHING	Assess breathing. Look, listen, feel. Give two effective breaths.	**THE CHILD IS UNRESPONSIVE AND NOT BREATHING NORMALLY.**	
CIRCULATION	Assess for circulation and / or need for compressions Feel for a pulse.	**THERE IS NO DEFINATE PULSE WITHIN 10 SECONDS.** **Pulse check for older child:** • **Femoral or carotid .**	2 min

CIRCULATION **COMPRESSIONS**	Start compressions • Correct rate. • Correct depth. • Allow full recoil. • Correct landmark. • Correct hands. • Correct ratio.	**15 compressions : 2 Ventilations.** **Rate 100-120 compressions per minute.** **1/3 depth of chest.** **One or two-hand compressions.**	
Note for instructor about defibrillation practice	**The majority of healthcare facilities when responding to a child or infant that is not breathing and has no pulse will immediately place defibrillation pads on the patient. If this is how your facility responds in these circumstances then you need to follow the C.O.A.C.H.E.D. approach no matter what rhythm the child is in.** **For some facilities there first response is to place ECG leads on an infant or child that is not breathing and has no pulse. In this instance you will continue to care for the patient, pausing CPR every 2 minutes to assess the patient's rhythm. If the infant/ child does go into a shockable rhythm then the defibrillator pads are attached to the patient and the C.O.A.C.H.E.D. approach is followed.** **As an instructor teach the approach that your facility expects your staff to follow.**		
DEFIBRILLATOR	Allocate one person in charge of the defibrillator. **C**ompressions Continued. **O**xygen that is free flowing away. **A**ll else clear. **C**harge the defibrillator to 4J/kg. **H**ands off for compressions. Compression person to respond, 'I'm safe'. **E**valuate rhythm - The child is in a non-shockable rhythm. **D**isarm and dump the shock. Feel for a pulse – there is no pulse.	Attach the defibrillator pads while CPR continues and follow the C.O.A.C.H.E.D. approach. ***Show laminated defibrillator card with PEA rhythm strip.*** **THERE ARE NORMAL LOOKING COMPLEXES ON THE ECG WITH NO PALPABLE PULSES**	1 min
ADRENALINE	Continue CPR while establishing IV / IO access. Administer Adrenaline immediately . Adrenaline 10 mcg/kg IV / IO 0.1 mls/kg of 1:10,000. Flush with 0.9% sodium chloride.	**8 year old = approx 30 kg.** **300 mcg or 3 mL of 1:10,000.** **Repeated every 2nd cycle (approx every four mins).**	

Coming up to 2 minutes **Prepare for rhythm check**	Continue CPR for two mins. Towards the end of the 2 minute cycle demonstrate the C.O.A.C.H.E.D. approach to defibrillation. **C**ompressions Continued. **O**xygen that is free flowing away. **A**ll else clear. **C**harge the defibrillator to 4J/kg. **H**ands off for compressions. Compression person to respond, 'I'm safe'. **E**valuate rhythm - The child is in a non-shockable rhythm. **D**isarm and dump the shock. Feel for a pulse – the infant has no pulse. Feel for a pulse – the child has no pulse.	**THERE IS A POTENTIALLY PERFUSING NON SHOCKABLE CARDIAC RHYTHM BUT NO PULSE.**	
	Continue CPR. Think about reversible causes.	Give a fluid bolus of 20 mL/kg IV. In this patient this will be 200mL of 0.9% sodium chloride. If signs of shock persist after the first bolus give a second bolus. *For a senior group consider making the BSL 1.8mmol and to have participants give a 10% dextrose bolus at 2.5mLs/ kg.	1 min
PAUSE & DISCUSS Reversible Causes	**'OK, the patient is not going to get any better or worse. Let's discuss Reversible Causes…'** What are the 4 H's and the 4 T's? 1. **H**ypoxia. 2. **H**ypovolaemia. 3. **H**ypo / **H**yperkalaemia, hypoglycaemia metabolic. 4. **H**ypothermia. 5. Cardiac **T**amponade. 6. **T**ension pneumothorax. 7. **T**oxins / poisons. 8. **T**hrombosis – cardiac and pulmonary. What could be some of the causes? What should you be considering at this point in time? Discuss the importance of a priority assessment of ruling all of the		3 min

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