ANZCA
FPM

CONTINUING PROFESSIONAL DEVELOPMENT

ANZCA and FPM CPD Program

Cardiac arrest for specialist pain medicine physicians ER session guideline

Group activity

Category 3 Emergency response

Purpose

This guideline assists hospitals, private practice groups and other course providers develop and conduct Cardiac arrest specialist pain medicine physicians (SPMP) Emergency Response (ER) sessions. It defines the learning objectives and other requirements for education providers to become recognised Cardiac arrest (SPMP) ER providers for the purposes of the ANZCA and FPM CPD program.

For CPD participants, this guideline provides information on what recognised Cardiac arrest (SPMP) ER sessions involve and how to record this activity.

Related documents

1. Cardiac Arrest (SPMP) ER activity recognition of suitability application form
   Course providers must apply for college recognition of your session as a suitable Cardiac arrest (SPMP) ER activity for the ANZCA and FPM CPD program. Providers are encouraged to develop sessions that also satisfy local needs, incorporating local staff, work environments and equipment.

Importance of Cardiac Arrest SPMP ER education

Procedures in pain medicine include diagnostic and interventional techniques for acute, cancer, and chronic non-malignant pain. They can be delivered in a variety of settings including operating theatres, inpatient wards and outpatient clinics. Cardiac arrest complicating a procedure administered for pain is rare, but all clinical SPMPs must be prepared to manage such a crisis. This requires a clear understanding of current advanced life support guidelines.

This guideline recognises that SPMPs who are not practising anaesthetists may not have extensive training in advanced life support, and that there are causes of cardiac arrest that are relatively more specific to settings where procedures for pain are being performed.

Definitions

The college uses the definitions and abbreviations of the Australian Resuscitation Council (ARC) and the New Zealand Resuscitation Council (NZRC).

Acronym

ALS: Advanced Life Support

Personnel

Clinical Lead: The medical officer nominated by each department/group/other educational provider to provide oversight of the Cardiac arrest (SPMP) ER sessions conducted by that provider but does not need to be directly involved in each Cardiac arrest (SPMP) ER session.

- Must be at specialist level and appropriately skilled and experienced to oversee the development of session content.
- Ideally will have medical education experience and/or credentials.
- Encouraged to complete a provider course for the algorithm being taught, where one has been established.

- May assume the role of lead facilitator for a particular session.

Lead Facilitator: The doctor who oversees the conduct of a specific Cardiac arrest (SPMP) ER session.

- Must be at least at the level of advanced training year 2 (ATY2) or equivalent.
- Must be appropriately skilled and experienced to deliver the session content.
- Ideally will have medical education experience and/or credentials.

Instructor: A health professional who conducts the individual "hands-on" skills stations/ scenario rehearsals with guidance from the lead facilitator.

- May not be a medical officer.
- Must be appropriately skilled and experienced to deliver the session content.
- Ideally will have medical education experience and/or credentials.

Recommended resources

Recognised emergency algorithms

ANZCA and FPM exclusively endorses the ALS guidelines of the Australian Resuscitation Council and the New Zealand Resuscitation Council.

Specialists with specific sub-specialty practice, or specialists resident in other countries, should contact the CPD team to ascertain if alternative guidelines are recognised for their individual circumstances.

Session format

Cardiac arrest (SPMP) ER sessions may be presented face-to-face or virtually.

If Cardiac arrest (SPMP) sessions are delivered virtually, observation of and feedback to each participant must occur in real time. This includes demonstration of leadership skills.

Learning objectives

Scope of Cardiac Arrest ER sessions

As a minimum, education sessions are required to provide the opportunity for participants to meet the learning objectives listed below. Objectives marked with an asterisk (*) require participants to actively engage in activities to practice this skill during the session.

Virtual/online workshops will be conducted with live sessions (i.e., participants must be observed in real time). Enrollment in virtual/online learning must ensure participants display leadership skills in a live session if unable to meet physically to direct or lead a team.

Mandatory learning objectives

By the end of the education session, participants will be able to:

1. Describe the ALS algorithm including 'shockable' and 'non shockable' pathways
2. Recognise ventricular fibrillation (VF), pulseless ventricular tachycardia (VT), pulseless electrical activity (PEA) and asystole
3. Recognise predisposing medical conditions for cardiac arrest (for e.g. coronary artery disease, structural heart disease, permanent pacemaker/automated implantable cardioverter defibrillator, pulmonary hypertension, severe obstructive sleep apnoea)
4. Describe reversible causes of cardiac arrest in any setting:
    - 4 H's
        - Hypoxia
        - Hypovolaemia
        - Hypothermia
        - Hyperkalaemia
    - 4 T's
        - Tension pneumothorax
        - Tamponade
        - Toxins
        - Thromboembolism

5. Recognise other causes of cardiac arrest that are relatively more specific to pain management practice (anaphylaxis, local anaesthetic toxicity, high-spinal, cerebrovascular injection of local anaesthetic, tension pneumothorax, sedation related airway obstruction and respiratory depression)
6. Recognise the clinical features of cardiac arrest*
7. Initiate the management of patients with cardiac arrest*
8. Demonstrate basic airway manoeuvres (chin lift and jaw thrust), and the appropriate sizing and insertion of oropharyngeal and nasopharyngeal airways*
9. Demonstrate oxygenation and ventilation using a face mask and self-inflating bag*
10. Demonstrate appropriate sizing and insertion of a supraglottic airway device*
11. Demonstrate external cardiac compression*
12. Recognition of need for early defibrillation if shockable rhythm
13. Demonstrate the safe use of a defibrillator* (It is strongly recommended that practitioners familiarise themselves with the type of defibrillator(s) available in their usual workplace/s)
14. Demonstrate the appropriate selection and administration of drugs in cardiac arrest*
15. Demonstrate leadership, including clear instruction of resuscitation priorities to team*
16. Recognise return of spontaneous circulation
17. Discuss the appropriate time and manner in which to cease resuscitation efforts
18. Describe the fundamentals of post-resuscitation care
19. Describe the principles and application of a structured approach to handover in the acute care setting
20. Recognise that non-technical and teamwork skills, as well as initiation of management protocols, are vital in the management of cardiac arrest.

Optional learning objectives

Education session providers may elect to expand the focus of teaching to include additional objectives if it is deemed that this would facilitate more effective teaching for the particular target audience. Suggestions for consideration include:

- Recognise the non-technical and teamwork competencies that have a positive impact during management of cardiac arrest complicating a pain management procedure and employ strategies to utilise them
- Discuss the role of cognitive aids in the management of cardiac arrest
- Recognise the role of human centred design as it relates to emergency equipment and medical practices
- Discuss the use of cardio-version and external pacing
- Recognise peri-arrest arrhythmias
- Discuss the legal, ethical, and occupational health and safety issues associated with ALS interventions
- Describe documentation requirements around cardiac arrest

Session structure

The education session is required to:

1. Provide pre-course reading that refers to the relevant algorithms/guidelines used in the session and provides relevant foundation knowledge of the session content.
2. Be deliverable as a continuous session or in parts.
3. Have a minimum total duration of ninety (90) minutes and provide hands-on activities, which include scenario-based rehearsal, to achieve objectives marked with an asterisk (*). A minimum of eighty (80) minutes of group practice is recommended.
4. Include a variety of team-based scenarios, including shockable and non-shockable rhythms.
5. Be conducted by a lead facilitator and provide at least one instructor per four participants. Instructors need to observe each participant while they are working through scenarios and provide verbal feedback to ensure they are achieving the objectives of the session.

6. Utilise the following equipment:
    - mannequin that can:
        - be ventilated via bag-mask
        - have a supraglottic airway inserted
        - have CPR performed on it
        - be defibrillated
    - self-inflating bag plus face mask
    - oropharyngeal airways, nasopharyngeal airways and supraglottic airways in different sizes
    - defibrillator
    - ability to display relevant arrhythmias, either on a monitor or in hard copy
7. Course directors who wish to record information relating to the performance or conduct of participants must obtain written consent and adhere to the privacy policies of their organisation and location. ANZCA and FPM do not collect this information and it is optional for the course provider and director to do so.

Session materials

The following materials (in hard or electronic format) may be provided to facilitators and/or participants as relevant:

- Facilitator guide (including equipment list, scenario outlines, and a guide to the safe use of the defibrillator/s to be used)
- Participant list (date, venue, participant names)
- Session learning objectives and outline
- ALS algorithms handout
- Session evaluation form (feedback from participants)
- Certification of completion, including ANZCA recognition code and session duration in hours (must be provided to participants).

ANZCA and FPM CPD portfolio recording

Participants record this activity under

- Category 3 *Emergency response: Cardiac arrest SPMP ER* with the Certificate of completion uploaded as evidence.

Facilitators who are also CPD participants record this activity under

- Category 3 Emergency response: *Cardiac arrest SPMP ER* with confirmation of facilitation uploaded as evidence.

Change control register

Version	Author/s	Reviewed by	Approved by	Approval date	Sections modified
1	Dr Mark Alcock	FPM PSC Committee	CPD Committee	2019	Created
2		CPD team L Roberts		2023	• Updated branding • Incorporated change control register