





- This Pre-reading booklet is designed to give you background information on the management of emergency in your practice. On the training day there will be a theory session (2 hours) followed by a practical hands on training (4 hours) to assist you in dealing with medical emergencies that may arise in your practice.
- The focus of this pre-reading is about managing the team. What steps do you currently have in place at your practice to manage a medical emergency?
- All emergencies require team-work and understanding the process involved in this is crucial to you being able to manage a medical emergency.
- During the course we will discuss the common emergency conditions, their presentation and current treatment. The emphasis will be on practical training covering resuscitation techniques for both medical and trauma emergencies, including: advanced airway management, IV/IO access, team based CPR, and monitoring of the patient.
- The reading should also assist you in putting together questions for discussion during the training.
- We look forward to seeing you at the training.



# The Need for a Team Approach

It is difficult to obtain a consistently good outcome in an emergency situation unless:

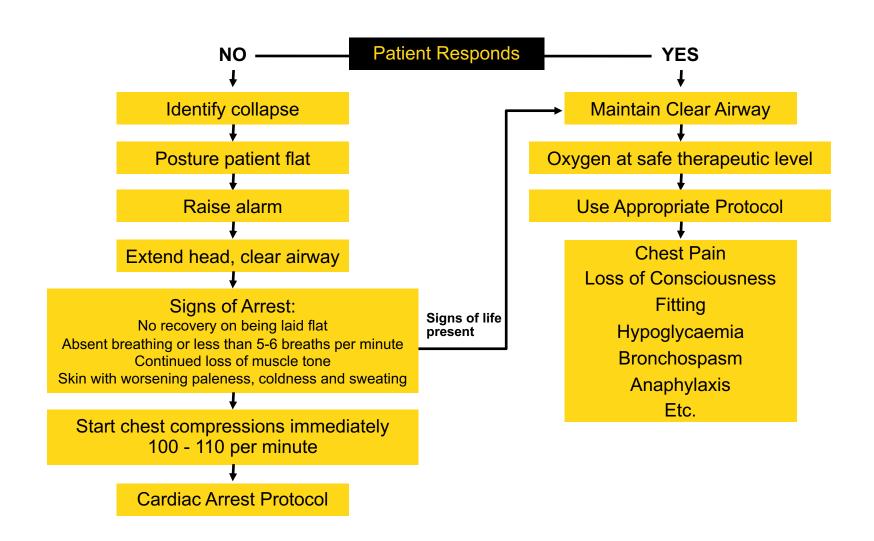
- The threat has been assessed.
- A plan has been developed and agreed.
- The team has practiced their response.



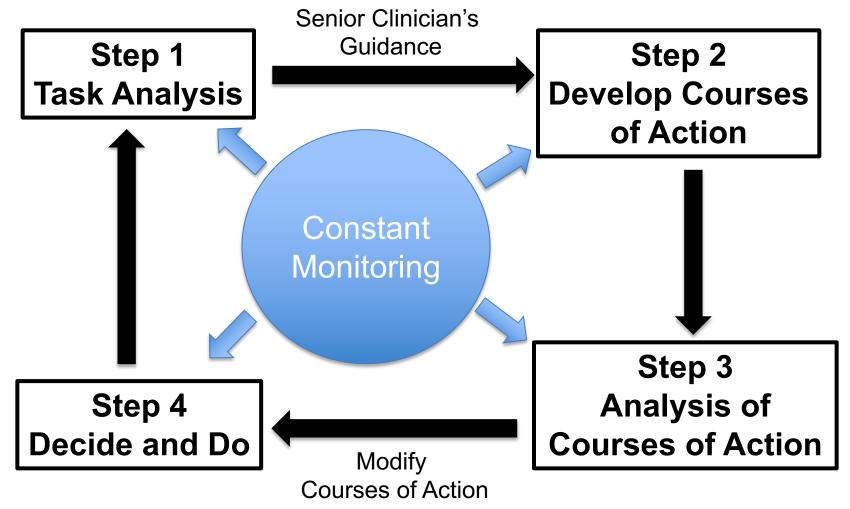
# The Need for a Team Approach

- During the course the division of effort and how to manage an emergency will be discussed at length and practiced so that you can decide for yourself whether the approach will benefit your practice.
  - The approach we use, Crew Resource Management (CRM) has been adapted from the airline industry, and we will be taking you through the division of responsibilities and the roles of the clinician, nurses and other staff in managing an emergency.
  - We will also be taking you through skillsets in CPR, including airway management and pharmacology.

## **Treatment Algorithm Medical Emergencies**

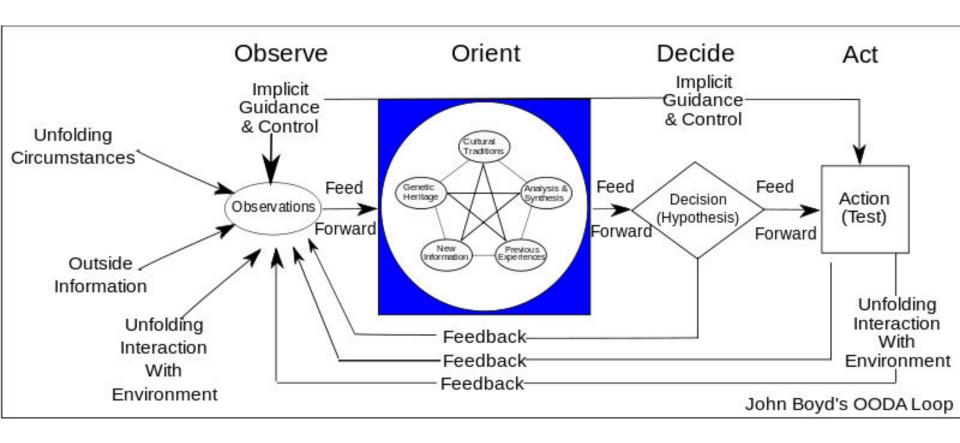
















- Crew resource management (CRM) developed in the 1970s when it was realised that over 70% of aircraft accidents were due to human error.
- It addresses the impact of human factors on job performance
- It identifies deficiencies in communication and relationships that lead to error





- CRM is a systematic approach to safety
  - It helps identify the root cause of a failure in a system
  - It allows better design of equipment, processes and practices



- Effective people work in teams not collections of competent individuals
  - CRM is not simply a crisis management tool
  - CRM is routine and everyday
  - CRM addresses behaviour in order to foster team effectiveness
  - CRM requires training and practice

# **Team Organisation**



- Team Organisation
  - Operator Group Senior clinician
  - Logistic Group Assistant/nurse
  - Communications Group Reception
  - Functional Group/s other personnel as required

## **Operator Group**



#### Tasks

- Keep good situational awareness
- Use this checklist
- Watch everything necessary is being done
- Let others do the tasks
- Maintain focus on the whole scene.
- Check and re-check signs, symptoms, observations
- Reconfirm/Reject provisional diagnosis

## **Logistics Group**



#### Tasks

- Prepare and manage the room
- Obtain and control all equipment
- Give Guidelines to Clinician
- Get ahead of clinician's decision-making

## **Communications Group**



#### Tasks

- Write down time emergency declared
- Act as scribe unless required for functional group
- Communicate with ambulance service

## **Functional Groups**



- In cardiac arrest there may be up to four groups:
  - Compression group,
  - Defibrillation group,
  - Airway and ventilation group, and
  - IV access and pharmacology.



### **Human Factors**

- Errors arise because good people are:
  - Agitated,
  - Confounded, or
  - Overwhelmed
- Usually Because they are:
  - Tired,
  - Hungry, or
  - ILL

## **Team Factors**

- Errors arise in teams because:
  - Confusion over roles,
  - Authority gradient,
  - Bad communication.
- Usually due to:
  - No plan,
  - No training,
  - No practice.













## **Hazards**

- Organisational
  - Process
  - People
    - Clinician,
    - Nurses,
    - Receptionists,
    - Patient
  - Equipment
  - Pharmacological
  - Environment Surgery
  - Situation



# Multiplier

#### Information

- Medical history of patient
- Limitations of equipment
- Limitations of personnel

#### Situational Awareness

- Reduced monitoring capability
- Deviation from Standard Operating Procedure
- Unexpected distractions
- Time pressure
- Information overload
- Complacency

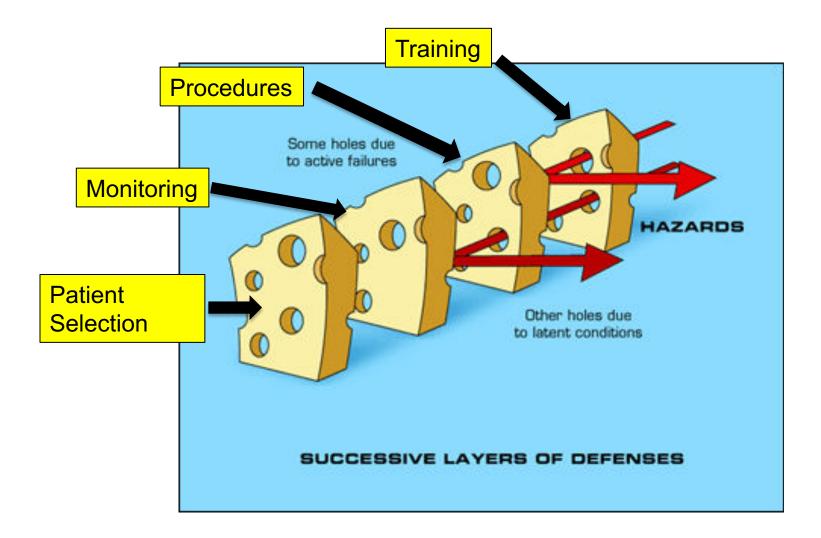


# **Managing Risk**

- Supervision
- Planning and rehearsals
- Team fitness,
  - Physical,
  - Emotional,
  - and mental.
- Environment
  - Practice layout,
  - Complexity closed doors and isolated areas.



## **Defences** James Reason's Swiss Cheese Model



# **Leading Cause of Air Crashes**

Pilot Error





# **How Much Practice is Enough?**

- To achieve mastery of a skillset a professional sports player or musician requires 10,000 hours of practice. An Astronaut 5,000 to 10,000 hours. Medical professionals get:
  - Advanced Care Life Support 6 hours
  - Central Line Placement 1 hour
  - Advanced Airway Management 1 hour

# **Tips**

- Set stringent standards
- Develop and stick to checklist
- Review of procedures
- Discussion amongst team
- Constant cross checking
- Rehearse
- Review





#### Informing, Educating and Supporting

These Protocols do not replace training and are to be used as a support for you and your team in handling medical emergencies.

Cynergex can come to your site to conduct customised, accredited training in Medical Emergencies and CPR.

Please ring 1300 793 649 or visit our website for more information.

Medical Emergencies Protocols ©2008 Cynergex Group Pty Ltd. ABN 54 071 826 321

ISBN: 978-0-646-50347-9

37 / 2 Chaplin Drive, Lane Cove NSW 2066 Phone: 1300 793 649 • Fax: 02 8090 7043 • www.cynergexgroup.com.au