MET Team Training

Aims
Interprofessional training focusing on human factors and crisis resource management (CRM)

Course description/outline
Interdisciplinary and interprofessional team training of teams consisting of 2 doctors and 2-3 nurses
Half-day course with introductory lecture on CRM principles.
Two scenarios (approx. 15-20 minutes) followed by debriefing (approx. 30-50 minutes)

Participants
ICU registrars, senior ICU nurses, coronary care nurses, medical registrars

Scenarios
- **Scenario 1**
  Postop thyroid surgery developing shortness of breath and stridor
  Emergency management of compromised airway with suspected neck haematoma
  Decision making around airway management on ward vs transport to theatre
  Escalation/call for help
- **Scenario 2**
  Rapid atrial fibrillation pre colonoscopy with conscious collapse
  Decision making around pharmacological vs electrical therapy of rapid atrial fibrillation

ICU Difficult Airway Management Skills Workshop

Aims
Familiarization and hands-on training of difficult airway equipment for ICU staff

Course description/outline
Interprofessional skills training
Half-day course with introductory lecture on difficult airway equipment and techniques as well as management algorithms of the unanticipated difficult airway

Participants
ICU doctors (trainees, consultants) and ICU nurses

Skills stations
Bag mask ventilation and use of adjuncts
Laryngeal mask ventilation
Endotracheal intubation (direct and videolaryngoscopy) including awake laryngoscopy and use of bougie
Cricothyrotomy (percutaneous using Melker Kit asn surgical)

Further development (in progress)
Online learning material including videos
Team based case scenarios of unanticipated difficult airways

Advanced Life Support In Cardiac Surgery

Learning objectives:
Cardiac arrests in patients post cardiac surgery
Emergency resternotomy skills training
Internal cardiac massage

Participants
ICU registrars and consultants, ICU nurses
Cardiac surgical registrars and Consultants, cardiac HDU nurses

Skills stations
- IABP insertion and troubleshooting
- Surgical drape application and resternotomy
- Internal cardiac massage and defibrillation

Small group workshops
- Cardiac pacing
- ABCDE approach
- ECG and blood gas interpretation

Real-time skills drill
- Cardiac arrest scenarios requiring advanced life support including resternotomy and internal cardiac massage/defibrillation

IC-ALS (Intensive Care Advanced Life Support)

Learning objectives:
Advanced life support for Intensive Care registrars
Special circumstances of cardiac arrests in critically ill patients

This project was possible due to funding made available by Health Workforce Australia
Half-day course of lectures, skills training and cardiac arrest scenarios

**Participants**
ICU registrars and consultants, ICU nurses

**Lecture**
- Principles of advanced cardiac life support in the critically ill

**Skills training**
- Safe defibrillation

**Cardiac Arrest Scenarios**
- Cardiac arrest scenarios including shockable and non-shockable rhythms
- Reversible causes of cardiac arrests in the critically ill patient
Cardiac Arrest In Special Circumstances

Aims/Learning objectives:
Cardiac arrest in special circumstances (asthma, tension pneumothorax)
CRM principles (leadership/followership, decision making, task prioritization)

Course description/outline
Large group observational training and debriefing for 20-30 ICU nurses
Cardiac arrests in patients with asthma
Faculty demonstration (2 doctors, 3 nurses) with live video-view and video debrief

Scenario
20 yo asthma patient suffering cardiac arrest in ICU complicated by tension pneumothorax

Intraosseous Cannulation Training

Aims/Learning objectives:
Credentialling process for the use of an intraosseous drill (Vidacare, EZ-IO) in accordance with Melbourne Health policy

Course description/outline
- 40 minute interactive online learning package
- 15 minute lecture (revision of the online learning content)
- 30 minute skills training using part task trainers

This project was possible due to funding made available by Health Workforce Australia
Royal Melbourne ICU Simulation Special Interest Group

As a result of the increased simulation activities in the critical care field, a simulation special interest group was formed by ICU team members. The group currently consists of an ICU Specialist, an ICU advanced trainee, a senior ICU nurse (CNS), an ICU nurse educator and 7 ICU nurse specialists as well as a simulation educator.

The aims of the group include

- Providing team and skills training for ICU staff with a focus on patient safety
- Faculty development (NHETSim)
- Establishing an ICU Nurse Simulation Educator Fellowship
- Conducting research in the field of critical care teamwork