Transition to Practice
Emergency Nursing Program

NSW
GOVERNMENT | Health

Facilitators' manual

CONTENTS

ABBREVIATIONS USED IN THIS MANUAL

A	Airway
ACS	Acute Coronary Syndrome
AIN	Assistant in Nursing
ATS	Australasian Triage Scale
B	Breathing
C	Circulation
CNC	Clinical Nurse Consultant
CNE	Clinical nurse Educator
CNS	Clinical Nurse Specialist
CO$_2$	Carbon Dioxide
CPD	Continuing Professional Development
CT	Computerised Tomography
D	Disability – Neurological function
DoCs	Department of Community Services
DOH	Department of Health
E	Exposure
ED	Emergency Department
EEN	Endorsed Enrolled Nurse
EN	Enrolled Nurse
ETT	Endotracheal tube
GCS	Glasgow Coma Scale
GP	General Practitioner
HIV	Human immunodeficiency virus
HR	Heart rate
IVC	Intravenous cannula
IV	Intravenous
LLQ	Left lower quadrant
LUQ	Left upper quadrant
LOC	Loss of consciousness
O$_2$	Oxygen
OT	Operating Theatre
NE	Nurse Educator
NM	Nurse Manager
NP	Nurse Practitioner
NUM	Nursing Unit Manager
NSW	New South Wales
RLQ	Right lower quadrant
RUQ	Right upper quadrant
RN	Registered Nurse
STI	Sexually transmitted infection

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1 Introduction

1.1 THE TRANSITION TO EMERGENCY NURSING PROGRAM

Working in the fast-moving environment of a hospital's emergency department, the emergency nurse is considered to be at the 'front line' of patient care. Emergency nurses face many challenges on a day-to-day basis – working as part of a team evaluating and treating patients who have suffered a minor or major trauma, prioritising the urgency of their care, and providing emotional support to the patient and their family.

Because they are treating and evaluating patients in the emergency or critical phase of their illness or injury, emergency nurses need to have a broad set of skills, be familiar with a range of illnesses, and be able to 'think on the run'. The types of injuries and illnesses that emergency nurses deal with are as diverse as the people they are treating. One minute it could be a person who has been involved in a major car accident, the next it could be an elderly person with a broken hip or a sick child with fever.

In a typical day, an emergency nurse could be responsible for resuscitating patients, triaging and treating less urgent patients, providing care and treatment of their injuries or illnesses and providing the evaluation and support needed for a patient to return home. Emergency nurses can be members of disaster teams carrying out rescues or assisting at the scene of a major car accident or disaster.

An emergency nurse needs to act with a high degree of autonomy and have the ability to initiate treatment with limited direction while at the same time educating and supporting the patient and their family.

This program will help educate nurses seeking to make the transition to becoming an emergency nurse. It will assist the nurse to begin developing a broad knowledge and clinical skill base, required to care for emergency patients.

The Transition to Emergency Nursing Program has not been designed to replace pre-existing programs where learning outcomes are similar to those identified within the Program Outline.

The framework for the Transition to Emergency Nursing Program is underpinned by the need to develop a culture where the patient is both the heart of the system, and the driver behind change (refer *Special Commission of Inquiry Acute Care Services in NSW Public Hospitals* – (Garling) 2008).

1.2 WHO IS THIS MANUAL FOR?

This manual has been prepared for facilitators of the Transition to Emergency Nursing Program. A facilitator will co-ordinate a participant's journey through the Program and work with a clinical support person to ensure competency is achieved. A separate manual has been prepared for participants in the Program.

1.3 WHAT'S IN THIS MANUAL?

This program provides a standardised approach for the transition of staff to the emergency department. This Manual offers information to guide facilitation of the Program and includes the answers for the learning activities the participants are expected to complete.

1.4 HOW WE PREPARED THIS PROGRAM

The Transition to Emergency Nursing Program has been developed using the ideas, conceptual models and existing framework of emergency staff within NSW Health.

The following documents have been instrumental in developing the program:

• Nursing and Midwifery Continuing Professional Development Registration Standard http://www.nursingandmidwifery.gov.au/Registration-Standards.aspx.

• *Competency Standards* (College of Emergency Nursing Association).

• Transition to Practice Nurse Education Program Emergency Nursing (Queensland Department of Health, 2006).

• National Nursing and Nursing Education Task Force Final Report – The National Nursing and Nursing Education Taskforce (N_3ET) (Australian Health Ministers Advisory Council, 2006). Refer http://www.nnnet.gov.au/downloads/n3et_final_report.pdf

The Transition to Emergency Nursing Program has been developed in consultation with Nurse Managers, Clinical Nurse Consultants and Nurse Educators in emergency departments across NSW.

1.5 ACKNOWLEDGEMENTS

NSW Health would like to thank the following members of the Transition to Emergency Nursing Program Reference Group and Working Party, who have been integral to the development and review of this document.

Reference Group Members formed in 2008

Jodie Ekholm	NE SSWAHS
Tim Williams	NUM GWAHS
Audas Grant	CNC GSAHS
Sarah Hoy	NE SESIAHS
Margaret Murphy	CNC SWAHS
Rhonda Nash	CNE NSCCAHS
Sharene Pascoe	CNC NCAHS
Diana Williamson	NE HNEAHS

Working Party Members formed in 2006

Rebecca Dickens	CNE Children's Hospital Westmead
Vicki Douglas	CNE Tamworth HNEAHS
Susan Lang	Nursing and Midwifery Office, NSW Department of Health
Jonathan Magill	CNC Prince of Wales Hospital SESIAHS
Jenny Major	CNE Children's Hospital Westmead
Pamela McAlen	CNC Wollongong SESIAHS
Rebekka Middleton	CNC Wollongong SESIAHS
Margaret Murphy	CNC Westmead Hospital SWAHS
Sharene Pascoe	CNC Lismore NCAHS
Serena Shaw	CNE Tamworth HNEAHS
Brian Shimadry	CNC Concord Repatriation Hospital SSWAHS
Catherine Sumsky	NE Sydney Children's Hospital SESIAHS
Richard Walker	CNC Critical Care Broken Hill GWAHS
Phil Way	CNC HNEAHS

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Queensland Health Department

Elizabeth Leonard	CNC Trauma RPAH
Tim Wand	NP Mental Health RPAH

Lisa Coombs – Project Officer Transition to Emergency Nursing and Transition to Intensive Care Programs. Nursing and Midwifery Officer, NSW Department of Health

2 Program outline

2.1 PROGRAM OUTLINE

Program aims

The Transition to Emergency Nursing Program aims to meet the needs of all stakeholders within the dynamic context of health, and provides clinicians within the emergency setting a standardised yet flexible program in which to:

• Further develop the confidence and competence of the emergency nurse within a supportive clinical setting.
• Enhance professional adjustment of the nurse new to emergency practice, and their assimilation into the workplace.
• Improve retention in the nursing workforce.
• Work in collaboration with all members of the healthcare team to develop an educationally supportive clinical culture.
• Use current processes[1] and professional development opportunities[2] already available within area health services to provide the novice emergency nurse a comprehensive but flexible program that supports their transition from novice to advanced[3] beginner.
• Provide varied learning opportunities, during which the participant can access, share and validate knowledge.
• Develop communities of practice that are reflective, think critically and respond appropriately.
• Provide quality care and outcomes for their patients.
• Ensure development of core foundational skills and knowledge to enable safe delivery of care.

2.2 WHAT THE PROGRAM WILL DELIVER

Participants who complete the Program will be able to:

• Discuss the context of emergency department care across healthcare disciplines.
• Assess and identify abnormalities of a patient's airway including c-spine precautions and provide safe and effective care to the patient.
• Assess and identify abnormalities of a patient's respiratory status and provide safe and effective care to the patient, including respiratory and oxygenation support.
• Assess and identify abnormalities of a patient's cardiovascular, fluid and electrolyte status and provide safe and effective care to a patient requiring non-invasive haemodynamic monitoring and cardiovascular support.
• Assess and identify abnormalities of a patient's gross neurological function and provide safe and effective care of the patients with neurological dysfunction and/or disability.
• Assess the patient's level of pain and plan safe and effective management.
• Develop skills essential to Emergency Nursing, including:
  - primary survey
  - secondary survey
  - focused history-taking
  - effective and appropriate documentation and communication
  - legal requirements
  - safe disposition and transfer of a patient
  - appropriate use of clinical guidelines
  - communication with aggressive patients/relatives.

[1] Performance appraisals, skills trees, support mechanisms

[2] In-services, e-learning, continuing professional development programs, learning contracts, portfolios & forums

[3] **Novice:** A clinician who has no practical experience and must base what they do on principles and rules (Benner:1984)
  Advanced Beginner: A clinician who has dealt with enough real patient care experiences to recognize recurring components of the situation. They are also learning to discriminate between normal and abnormal situations and establish priorities as to what's important (Benner: 1984).

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• Develop skills and acquire the knowledge required to assess and care for the individual needs of patients in a range of population groups including:
  - mental health
  - obstetrics and gynaecology
  - drug and alcohol
  - elderly
  - paediatrics.

2.3 TARGET GROUP

The Transition to Emergency Nursing Program is aimed at nurses currently working in Emergency Departments particularly:

• Nurses with limited Emergency Nursing experience (this may include first year registered nurses).

• Nurses wishing to make a transition to Emergency Nursing from other clinical areas.

• Nurses returning to Emergency Nursing.

2.4 THEORETICAL FRAMEWORKS

The Transition to Emergency Nursing Program is underpinned by the principles of adult learning.

2.5 PROGRAM FEATURES

The features of the Transition to Emergency Nursing Program include:

• Continuing competence framework.

• Team approach to clinical support.

• Orientation – Emergency Department essentials.

• Clinical experience.

• Professional development.

These features are discussed below.

Continuing competence framework

The Program incorporates a continuing competence framework to help participants to identify their development and learning needs[4]:

• Maintenance of a professional portfolio.

• Assessment of clinical practice.

Diagram 1: Maintaining Competence to Practice[5]

Maintaining competence is a continuous process that can be viewed as a cycle of assessment, professional feedback and review, goal-setting, participating in continuing professional development and reflection[6].

Undertaking Self Assessment

Reflecting on Impact of Continuing Competence

Participating in Professional Review

Participating in CPD and Practice

Setting Professional Goals

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[4] ANMC, Continuing Competence Framework, 2009

[5] Diagram based on ANMC Continuing Competence Framework, (2009,5)

[6] ANMC, Continuing Competence Framework, (2009:5)

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Team approach to clinical support

To maintain high quality healthcare that is delivered with compassion, attention to detail and clinical excellence there is a need to ensure that junior staff are adequately supervised, supported and developed.

As nurses work within a team, it is an expectation that team members support them as they develop the confidence and competence required to practice independently.

Participants are allocated a support person to mentor and precept (in addition to the Program Facilitator) them through their professional adjustment and skill acquisition.

A 'support person' is to be a senior registered nurse with the capability of assessing the participant in the absence of the Clinical Nurse Educator (CNE) or Program Facilitator. Together with the Program Facilitator, the support person is expected to guide participants learning and assist them in completing the learning activities. Support persons may be a registered nurse, Clinical Nurse Consultant, Nurse Practitioner, Clinical Nurse Specialist or Nurse Educator.

Ensuring that the participant has an effective support network is integral to achieving the desired Program outcomes. The NUM plays a pivotal leadership role in developing a supportive clinical culture where experienced and senior staff act as role models, facilitating learning with new, junior or inexperienced staff[7].

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Orientation

All participants are expected to attend and complete the mandatory requirements of corporate, nursing and emergency department orientation.

Clinical experience: Recognition of prior learning

What is Recognition?

Recognition is a term that covers Recognition of Prior Learning, Recognition of Current Competency and Skills Recognition. All terms refer to the recognition of competencies currently held, regardless of how, when or where the learning occurred.

This includes:

• Any combination of formal or informal training and education (tertiary studies or workplace training)
• Work experience, life experience or community work.

Why apply for Recognition?

Recognition allows the nurse to gain credit for units of competency by recognising the knowledge and skills already gained without repeating or undertaking unnecessary training.

Application for Recognition

• The nurse compiles evidence according to the guidelines provided. You may need to offer guidance and support to the nurse to put the application together.
• Recognition Application submitted to educator.
• Educator reviews the application and notifies the nurse of the outcome of Recognition Application approximately 2 weeks after submission.
• You may request the nurse to provide further evidence and/or attend an interview for clarification and/or validation of the evidence provided.
• If the application successfully meets all the requirements of the Transition to Emergency Nursing Program the nurse may be awarded recognition of prior learning for relevant program components.

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[7] Benchmark for Learning and Development Culture; Essentials of Care, point 3 (2009)

• If there is:
  - a gap in the nurses' knowledge and skills
  - a decision that the evidence does not meet the requirements of the Program
  - only partial RPL can be awarded based on the nurses' evidence.
• You will need to develop strategies for the training the nurse must undertake to meet the requirements of the Transition to ED Program.

What is Evidence?

There are many ways of showing evidence of knowledge, skills and attributes to meet the requirements of the competency or competencies of the Transition to ED Nursing Program. Evidence may include:

• Certificates, including transcripts.
• Current job description.
• Workplace records.
• Workplace projects.
• Workplace assessments.
• Attendance at workplace or community courses.
• Life experience narratives.
• References and testimonials.
• Interviews.
• Video or audio recordings of activities.

What to look for when reviewing evidence. You will need to review the nurses' evidence to ensure it provides:

• Validity – the documentation provides evidence against the complete unit of competency and clearly demonstrate skills, knowledge and attributes.
• Sufficiency – are there enough different types of evidence to clearly demonstrate the skills, knowledge and attributes?
• Currency – does the documentation clearly demonstrate the nurses' application of competency in the current role?
• Authenticity – have you verified that the evidence is the nurses' own work? The nurse may need to have evidence authenticated by a work supervisor/manager or another responsible party.

Professional development

Like other NSW Health employees, nurses are expected to participate in the professional development process. In addition, as a component of registration continuing professional development is required to be demonstrated by all registered and enrolled nurses. Continuing professional development is a shared responsibility of both the registered health professional and the organisation.

Professional development offers participants the opportunity to enhance their skills and knowledge both within the context of the clinical setting and the classroom. Professional development is based on the identification and prioritisation of learning needs by the individual nurse and the organisation.

To develop the novice emergency nurse, the following modalities are incorporated into the Program design:

• Clinical skills self-assessment.
• Learning contract.
• Structured learning opportunities.
• E-learning.
• Development of core skills.
• Portfolios.
• Supported clinical development.

2.6 COMMITMENT TO THE PROGRAM

At the commencement of the program the participant nurse, facilitator and support person should discuss the required level of commitment to the program from all parties. Nurses participating in the program are expected to attend relevant sessions and complete required activities within the required time frames and to actively seek to enhance their skills and knowledge in emergency nursing. As with many professional development opportunities this may require some commitment of time outside rostered shifts. The organisation has a responsibility to provide the relevant support and opportunities to learn and develop in line with the contents of the Resource Manual for the Transition to Emergency Nursing Program. The facilitator is expected to guide the participant through the program, assist in creating learning opportunities and assess participants learning as required. Support personnel also commit to facilitate learning and assess competency within the clinical environment.

2.7 PROFESSIONAL PORTFOLIO

Documentation of participation in learning activities can be recorded within the participant's professional portfolio as well as within the Participant's Workbook.

Continuing professional development (CPD) activities can be undertaken in a variety of ways, and may include:
• Attending study days.
• Completing online training.
• Attending online or face-to-face tutorials.
• Undertaking supervised practice for skills development.
• Working with a support person to improve practice.
• Reflecting on clinical practice with a support person.
• Participating in discussion forums.
• Participating in clinical supervision/action learning sets.
• Undertaking ward simulation exercises (e.g. mock arrests, management of deteriorating patient).
• Attending in-service education.
• Attending Continuing Professional Development workshops.
• Attending conferences.
• Attending professional interest groups (wound interest group).

2.8 STRUCTURED LEARNING ACTIVITIES

Participants are required to complete the program within 3-6 months of starting employment in the Emergency Department. Each section has been designed to build upon the learning outcomes of the previous one.

In addition to the structured learning activities in this document, participants will also be required to complete other training programs mandated by either NSW Health or their Health Service (e.g. DETECT).

Structured learning activities may be undertaken using a variety of modes, including face-to-face, e-learning, self-directed learning, and simulation.

2.9 DEVELOPMENT OF CORE SKILLS

The novice Emergency Nurse develops core skills within the clinical area by working as part of the multidisciplinary team. Within the Participant Workbook there are some clinical skills that are to be assessed and a table for the inclusion of other clinical skills that the participant masters. A copy of these are included in Section 5 of this manual.

2.10 EVALUATION

The Program will be evaluated in terms of key performance indicators, and by stakeholders, as outlined below.

Key performance indicators (KPIs)
• Percentage of staff that have completed the course requirements.
• Percentage of staff that have obtained the relevant objectives/goals within the 6 month time frame.
• Percentage of staff that have completed all clinical competencies.

It is expected that all facilities maintain records of participants' progress to illustrate achievement of KPIs.

Stakeholder evaluation

Participants will evaluate the Transition to Emergency Nursing Program using a survey tool at completion or exit.

The Nursing Unit Manager/Nurse Manager will be surveyed to evaluate the Program's effectiveness at 12 months. Results of this survey will be provided to the Nursing and Midwifery Office.

Recognising the fast changing environment of emergency, this program will be subjected to ongoing evaluation. Feedback to the Nursing and Midwifery Office will be imperative for changes to take place.

2.11 REFERENCES

Nursing and Midwifery Continuing Professional Development Registration Standard
http://www.nursingandmidwifery.gov.au/Registration-Standards.aspx

Benner, P.E. (1984). *From novice to expert: Excellence and power in clinical nursing practice.* Menlo Park, CA: Addison-Wesley.

Jones, T. (2004). 'A Review of Graduate Nurse Transition Programs in Australia', in Australian Journal of Advanced Nursing, Vol 23 (2).

College of Emergency Nursing Australasia (2007). *Practice Standards for the Emergency Nursing Specialist.*

Queensland Health (2006). *Transition to Practice Nurse Education Program Emergency Nursing.*

National Nursing and Nursing Education Taskforce (2006). National Nursing and Nursing Education Task Force Final Report

3 Activity answer sheets

Participants will be supplied with a workbook. They will be required to complete the activities and questions related to each module and associated competency assessments within 6 months. Answers are in green italics after each activity.

3.1 INTRODUCTION TO EMERGENCY NURSING

ACTIVITY 1

Discuss the models of care used within your hospital and emergency department.

Discuss the models of care utilised in the hospital and emergency department with participants.

ACTIVITY 2

Locate the local emergency department guidelines/policy on documentation. Discuss them with your facilitator or support person.

As per individual emergency department.

3.2 PATIENT ASSESSMENT

ACTIVITY 3

Locate the 'Deteriorating Patient' policy at your hospital. Identify each of the parameters that make up this criterion, and discuss one of the clinical indicators of urgency.

Discuss with participant.

3.3 AIRWAY

ACTIVITY 4

Read the respiratory chapter of any Anatomy and Physiology textbook to review the normal respiratory anatomy and physiology. (This material will not be covered in this section – it is assumed knowledge as it is taught at undergraduate level, so please familiarise yourself with the content.)

If necessary discuss any areas of concern with the participant.

ACTIVITY 5

Name five mechanisms of injury that may require application of a stiff neck collar. Identify the types of collars you have available in your facility and how they are applied.

Head injury.   *Diving accident.*

Motor vehicle accident.   *Spear tackles/sporting injuries*

Unwitnessed fall/fall.

Types of collars: discuss with participant those in your facility and correct application.

ACTIVITY 6

Name three indications for bag-valve-mask (BVM) ventilation.

Failure of ventilation.

Failure of oxygenation.

Failed intubation.

ACTIVITY 7

Name two contraindications for BVM ventilation.

BVM ventilation is absolutely contraindicated in the presence of complete upper airway obstruction.

BVM ventilation is relatively contraindicated after paralysis and induction (because of the increased risk of aspiration).

Discuss with participant.

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ACTIVITY 8

Name five different conditions that patients may present to the emergency department requiring intubation and discuss.

Anaphylaxis   *Burns.*

Foreign body   *Trauma.*

Overdose GCS <8 or equal to 8.   *Blunt trauma to larynx.*

Smoke inhalation with airway compromise.   *Cardiac arrest*

Severe head injury GCS <8.   *Severe asthma*

Severe circulatory compromise eg sepsis.   *Decreased GCS < 8*

Discuss with participant.

ACTIVITY 9

Go into the resuscitation area (or where the intubation equipment is kept) and familiarise yourself with the equipment.

Participants will need to engage with the facilitator or support person for help familiarising themselves with the intubation equipment.

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ACTIVITY 10

Complete the table below: Intubation drugs and general anaesthetic agents

Drug	Dose	Duration	Adverse effects
Thiopentone			
Ketamine			
Propofol			
Vecuronium			
Suxamethonium			
Other drugs used			
Other drugs used			

Answer – Complete the table as per site-specific protocols and discuss other drugs or agents that may be site specific.

ACTIVITY 11 (Optional dependent on site requirements)

Practice the process of checking the intubation equipment, its setup and assisting intubation with facilitator/support person.

Simulate the tying of an ET tube in place. Observe a patient being intubated if possible.

Ask your facilitator, support person or medical officer to show you a CXR with correct ET tube placement and discuss.

Assist the participant and discuss relevant issues and considerations.

3.4 BREATHING

ACTIVITY 12

Define the following terms:

Vital capacity: *The volume of air expelled from the lungs during a maximal forced expiration starting after a maximal forced inspiration.*

Residual volume: *The volume of air left in lungs after forced maximal expiration.*

Tidal volume: *The volume of air entering the nose or mouth per breath.*

Functional residual capacity: *The volume of gas remaining in the lungs at the end of a normal expiration.*

Discuss answers with the participant.

ACTIVITY 13

Kussmaul respirations – *rapid deep breathing characteristic of metabolic acidosis.*

Cheyne-Stokes respirations – *alternating periods of apnoea and hyperpnoea.*

Hypopnoea – *abnormally shallow respirations.*

Dyspnoea – *difficulty breathing.*

Apnoea – *cessation of breathing.*

Bradypnoea – *abnormally slow respirations.*

Tachypnoea – *abnormally fast respirations.*

Discuss responses with participant.

ACTIVITY 14

Review respiratory assessment in a relevant text and breath sounds on the following websites:

http://www.cvmbs.colostate.edu/clinsci/callan/breath_sounds.htm
http://www.med.ucla.edu/wilkes/lungintro.htm

Discuss answers with participants where required or appropriate to facilitate learning.

Q1. Which of the following terms is used to describe abnormal breath sounds:
   a) Bronchial.
   b) Vesicular.
   c) Adventitious.
   d) Tracheal.
   Answer – c.

Q2. Coarse crackles are heard in which of the following:
   a) Tension pneumothorax.
   b) Haemo pneumothorax.
   c) Pneumonia.
   d) Asthma.
   Answer – c.

Q3. Rhonchi are:
   a) Low-pitched and musical.
   b) High-pitched with a short inspiration.
   c) Low -pitched with equal inspiration and expiration.
   d) Low -pitched and sonorous.
   Answer – d.

Q4. Normal sounds heard over the suprasternal notch are called:
   a) Stridor.
   b) Vesicular.
   c) Continuous.
   d) Bronchial.
   Answer – d.

ACTIVITY 15

Identify the type of peak flow meter used in your facility and, with your facilitator or support person, demonstrate how you would instruct a patient to use the peak flow meter.

Answer any questions that the participant may have and ensure correct technique is demonstrated.

ACTIVITY 16

Identify the spirometer used at your facility and, with your facilitator or support person, demonstrate how you would instruct a patient to perform a spirometry test.

Answer any questions that the participant may have and ensure correct technique is demonstrated.

ACTIVITY 17

Discuss answers as required or appropriate.

Q1. What is the fractional concentration of oxygen in inspired air (F_iO_2)?: *21%.*

Q2. What are the two ways oxygen is transported to the tissues?: *Bound to haemoglobin and dissolved in plasma.*

Q3. What are the two ways to measure the saturation of haemoglobin with oxygen?: *Pulse oximetry and arterial blood gas analysis.*

Q4. Hypoxemia is defined as: *A PaO_2 below 60 mmHg, and SaO_2 or SpO_2 below 90% or either value below the desirable range for the patient's condition.*

Q5. Complete the following table.

Device	Oxygen Flow (litres/min)	(F_iO_2)	Appropriate situations the devices are used
Nasal cannula	2-4 L/min	0.24–0.44	
Simple face mask (Hudson)	5–10 L/min	0.30–0.60	
Partial rebreather mask	8–12 L/min	0.40–0.70	
Non-rebreather mask	10–15 L/min	0.60–0.80	
Venturi mask	4–12 L/min	0.24–0.50	

ACTIVITY 18

Observe a clinician setting up a CPAP/BiPAP circuit and applying it to treat a patient. Once you are confident, ask a designated assessor to observe you setting up and applying it to treat a patient who requires CPAP/BiPAP.

Sign off skill set relevant to Activity on NIPPV on participant's activity sheet if mastery is obtained, and answer any questions the participants may have.

ACTIVITY 19

Discuss answers as required or appropriate.

Q1. NPPV for acute respiratory distress can only be applied to what type of patient?
  a) An unconscious patient.
  b) A confused and agitated patient.
  c) A spontaneously breathing patient.
  d) An obtunded patient.
  Answer – c.

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Q2. Describe the physiological effects of continuous positive airway pressure.

Improved cardiac output and oxygen delivery.

Improved functional respiratory capacity.

Reduced work of breathing.

Decreased left ventricular load.

Q3. What are the indications for NIPPV.

Exacerbations of chronic obstructive pulmonary disease.

Asthma.

Acute cardiogenic pulmonary oedema.

Acute respiratory failure post surgery or post community-acquired pneumonia.

Q4. List six absolute contraindications for NIPPV:

Cardiac arrest.	*Acute coronary syndrome.*
Hemodynamic instability.	*Immediate endotracheal intubation.*
Apnoea.	*Upper airway obstruction.*
Decreased level of consciousness.	*Upper GIT bleeding.*
Facial trauma.	*Vomiting.*
Pregnancy.	*Patient declines.*

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ACTIVITY 20

Discuss with participant as required or appropriate.

Q1. A wheeze is the most reliable indicator of the severity of an asthma attack – true or false?

False.

Q2. Describe the initial management of an asthmatic patient who is acutely distressed.

• *Give oxygen to achieve SaO_2 >90%.*

• *Give short-acting beta-agonist Salbutamol via spacer or nebuliser.*

• *Take a full set of vital signs*

• *Notify medical officer*

• *Give corticosteroids as per medical officers orders.*

ACTIVITY 21

Discuss with participant as required or appropriate.

Q1. What are the signs of acute exacerbation of severe COPD?

Worsening hypoxaemia, acute respiratory acidosis (carbon dioxide retention), or both.

Q2.You should remove the patient's oxygen prior to taking a blood gas? True or false?

Answer – false

Q3. The aim of oxygen therapy is to improve oxygen saturation to:

  a) 100%.

  b) Over 90%.

  c) 10% better than the patient's normal saturation.

  d) 94%.

  Answer – b.

Q4. Inhaled bronchodilators are:

  a) Ineffective in the treatment of COPD.

  b) Contraindicated in patients with CO_2 retention.

  c) Only recommended when assisted ventilation is required.

  d) Effective treatments for acute exacerbations.

  Answer – d.

Q5. What are the signs of worsening hypercapnia?

Anxiety.	*Use of accessory muscles.*
Irritability.	*Diaphoresis.*
Confusion.	*Decreased tidal volume.*
Tachypnoea.	*Decreased level of consciousness.*
Tachycardia.	
Decreased level of consciousness.	

Q6. Name three (3) side effects of excessive use of beta-agonists.

Hypokalaemia and subsequent cardiac arrhythmias.

Tachycardia.

Anxiety.

Chest pain.

Tremors.

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ACTIVITY 22

Discuss with participant as required or appropriate.

Q1. Describe the risk factors for pulmonary embolism that you need to be alert to when taking a history from someone that presents with a respiratory disorder.

• *Age.*

• *Inherited thrombotic disorders.*

• *Virchow's triad – venous stasis, vessel injury, and/or hypercoagulable state.*

Q2. What is the mainstay of treatment for a patient with pulmonary emboli that is haemodynamically stable?

Anticoagulation with low molecular weight heparin.

ACTIVITY 23

Discuss with participant as required or appropriate.

Q1. Identify the common signs and symptoms of community-acquired pneumonia.

Cough, dyspnoea, sputum production, fever and pleuritic chest pain.

Q2. Antibiotic treatment administered within the first eight hours of presentation……..:

  a) Leads to lower mortality rates and shorter hospital stay.

  b) Reduces hypoxia.

  c) Reduces the yield of blood cultures.

  d) Contributes to resistant organisms.

  Answer – a.

ACTIVITY 24

Discuss with participant as required or appropriate.

Q1. Briefly describe the pathophysiology of cardiogenic pulmonary oedema.

An increase in the pulmonary venous pressure shifts the balance of forces between the capillary and the interstitium. Hydrostatic pressure increases and fluid exits the capillary at an increased rate, resulting in interstitial and, in more severe cases, alveolar oedema.

ACTIVITY 25

With your facilitator or support person, auscultate the chest of a patient with pulmonary oedema. Discuss.

Sign off skill set relevant to activity in participant's workbook if mastery obtained, answer any questions participants may have.

ACTIVITY 26

Discuss with participant.

Q1. Describe the signs and symptoms of a large pneumothorax.

Symptoms of pneumothoraces include dyspnoea and pleuritic chest pain. Dyspnoea may be sudden or gradual in onset depending on the rate of development and size of the pneumothorax. Pain can simulate pericarditis, pneumonia, pleuritis, pulmonary embolism, musculoskeletal injury (when referred to the shoulder), or an intra-abdominal process (when referred to the abdomen). Pain can also simulate cardiac ischemia, although typically the pain of cardiac ischemia is not pleuritic.

Physical findings classically consist of absent tactile fremitus, hyperresonance to percussion, and decreased breath sounds on the side with the pneumothorax. If the pneumothorax is large, the side with the pneumothorax may be enlarged with the trachea visibly shifted to the opposite side. With tension pneumothorax, hypotension can occur.

Q2. List the potential interventions to evacuate the air in a person with a large pneumothorax.

Aspiration of the air with a needle.

Placement of a percutaneous catheter attached to a Heimlich valve.

Insertion of a thoracic vent.

Insertion of a chest tube with underwater-seal suction drainage.

Q3. Identify the key nursing interventions required to maintain a chest tube system.

Prevent kinks and large loops of tubing to facilitate drainage and air evacuation.

Observe water seal chamber for unexpected bubbling indicating an air leak.

Assess patient to identify potential complications.

Monitor drainage.

ACTIVITY 27

With your facilitator or support person, identify the chest tube system used at your facility. Discuss and demonstrate how to set it up and the observations that need to be attended for a patient with a chest tube.

Answer any questions that the participant may have.

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3.5 CIRCULATION

ACTIVITY 28

Review the anatomy and physiology of the cardiovascular system in appropriate text. To consolidate your learning, you are encouraged to answer the following questions:

• What is the structure and function of the heart's conduction system?

• How is cardiac output calculated?

Answer any questions the participant may have.

ACTIVITY 29

Conduct a complete circulatory assessment and document your findings. Discuss your findings. Include health history, visual assessment, colour, skin turgor/warmth, blood pressure, arterial pulses, perfusion, capillary refill, apex beat and heart sounds.

Answer any questions the participant may have.

ACTIVITY 30

The only way to become confident in ECG interpretation is to practice. To develop this skill further, participants are advised to attend an ECG/rhythm continuing education program or utilise the interactive ECG tutorials available at http://www.ciap.health.nsw.gov.au. (Once on CIAP site click on 'clinical tools').

Participants may require further support in clinical application of learning.

ACTIVITY 31

Name the types of emergency department presentations that require an ECG and monitoring.

Explain the rationale for conducting this procedure.

Chest pain.

Electrolyte disturbances.

Life threatening arrhythmias.

Ingestion of pro-arrhythmic drugs causing actual or potential QT prolongation or bentricular arrhythmias.

Known cardiac conditions/disease.

Post operative cardiac surgery presentations.

Chest trauma.

Participants may wish to discuss the following.

Watch the presentation at

http://www.heartfoundation.org.au/SiteCollectionDocuments/ACS%20PPT%20Web.pdf
(You can also access it on the Heart Foundation website www.heartfoundation.org.au.)

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ACTIVITY 32

Complete the following table, providing a brief outline of the classifications of shock (eg septic) and the underlying pathophysiology, and give examples for each category.

Classifications of shock	Underlying pathophysiology
Septic	*Septic shock is defined by the manifestation of hypotension with evidence of infection.*
Spinal	*Decreased or no change in cardiac output, decreased systemic vascular resistance, Decreased capillary resistance, pulmonary capillary pressure and increased pulmonary vascular resistance.*
Hypovolaemic	*Decreased cardiac output, increased systemic vascular resistance, decreased capillary circulation and pulmonary capillary pressure, increased pulmonary vascular resistance.*
Obstructive	*Decreased cardiac output, systemic vascular resistance and capillary function, increased pulmonary capillary pressure and pulmonary vascular resistance.*
Cardiogenic	*Decreased cardiac output and capillary circulation, increased systemic vascular resistance, pulmonary capillary pressure and pulmonary vascular resistance.*
Anaphylactic	*Decreased cardiac output, systemic vascular resistance, capillary circulation, pulmonary capillary pressure and pulmonary vascular resistance.*

Table adapted from ACCCN's *Critical Care Nursing* (Elliott, Aitken, Chaboyer (eds) 2007, Mosby, Australia) – Chapter 15, page 445 Table 15.5 'Physiological changes in shock'.

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ACTIVITY 33

What are the differences in patient symptoms in systemic inflammatory response syndrome (SIRS), sepsis, severe sepsis and septic shock?

Type	Symptoms
Systemic inflammatory response syndrome (SIRS)	*A non specific syndrome that occurs as a result of a wide variety of severe clinical insults, and manifests in 2 or more of the following conditions:* • *Temperature>38 or <36.* • *Heart rate >90 beats/min.* • *Respiratory rate >20 breaths/min or $PaCo_2$ <32 mmHg.* • *White Blood Count >12 000/mm¬¬3 or 10% immature band (forms).* • *Patients may present with tachycardia, tachypnoea, hyperpnoea, hypotension, hypoperfusion, oliguria, leucocytocis or leucopenia, pyrexia or hypothermia. Patients may have metabolic acidosis, dry mucous membranes.*
Sepsis	• *Systemic inflammatory response to infection. Similar presentations as those in SIRS.*
Severe sepsis	• *Sepsis associated with organ dysfunction, hypoperfusion, or hypotension. Symptoms may include alteration in neurological status, and hypoperfusion abnormalities including oliguria.*
Septic shock	• *Absence of other hypotension, despite adequate fluid resuscitation, along with the presence of perfusion abnormalities that may include but are not limited to lactic acidosis, oliguria, or acute alteration in neurological status.* • *Acute circulatory failure with persistent arterial hypotension unexplained by other causes and despite adequate fluid resuscitation.*

Table adapted from ACCCN's *Critical Care Nursing* (Elliott, Aitken, Chaboyer (eds) 2007, Mosby, Australia) – Chapter 15, page 445 Table 15.5 'Physiological changes in shock'.

ACTIVITY 34

Read the following management guidelines on acute coronary syndrome and discuss with your facilitator or support person:

http://www.heartfoundation.org.au/SiteCollectionDocuments/acs%20guidelines%20mja%20summary.pdf

'Guidelines for the management of acute coronary syndromes 2006' 17/04/06 MJA supplement vol 184 no 8 http://www.mja.com.au/public/issues/184_08_170406/suppl_170406_fm.html accessed through www.mja.com.au

3.6 DISABILITY

ACTIVITY 35

Using an appropriate text or website, review the anatomy and physiology of the neurological system and discuss with your facilitator or support person.

Discuss answers with participants to facilitate learning.

Q1. What are the **early** signs and symptoms of raised ICP?

Altered LOC.

Pupil dysfunction.

Motor weakness.

Sensory deficits.

Headache or seizure.

Cranial nerve palsy.

Q2. What are the **late** signs and symptoms of raised ICP?

Altered level of consciousness, altered behaviour.

Neurological dysfunction – e.g. decerebration.

Vomiting.

Headache.

Cushing's triad.

Q3. What are the nursing interventions for a patient with raised ICP?

Elevate head of bed 30^0.

Ensure optimal oxygenation.

Ensure your patient has adequate end organ perfusion (ie blood pressure).

Undertake minimal nursing activities ie suctioning, invasive procedures as these may result in noxious stimulit.

Adminsiter antibiotics if required – this is indicated for compound fractures of the skull.

Q4. What is Cushing's triad?

Cushing's triad is a sign of increased intracranial pressure. It is seen in head injuries with increased intracranial pressure (ICP). It is the triad of:

Bradycardia,

Hypertension (with widened pulse pressure), and

A change in respiratory pattern.

Q5. Discuss with your facilitator or support person the principles of neurological assessment and the need for close observation to detect deterioration.

ACTIVITY 36

For patients presenting to the emergency department with symptoms of headache, complete the following table.

• Provide a brief description of the condition.

• Identify the common signs and symptoms associated with that condition.

• Outline common treatments.

Condition	Signs and Symptoms	Goals of treatment (this may differ at each facility)
Intracranial haematoma	*Reduced level of consciousness* *Presence of a skull fracture*	• *Airway management.* • *GCS.* • *Vital signs.* • *Medical assessment.* • *CT scan.* • *Close ongoing neurological assessment*
Sub-arachnoid haemorrhage	*Patients usually complain of "the worst headache of my life" or "thunderclap" headache. Commonly associated symptoms include nausea and vomiting, neck stiffness, and photophobia. Patients who present with stupor or coma are at high risk for mortality.*	• *Airway management.* • *GCS.* • *Vital signs.* • *Medical assessment.* • *Management of hypertension.* • *+/- Surgical intervention* • *CT scan.* • *Close ongoing neurological assessment*
Meningitis	*Meningitis and septicaemia (blood poisoning) are not always easy to recognise, and symptoms can appear in any order. Some may not appear at all. In the early stages, the signs and symptoms can be similar to many other more common illnesses, for example flu.* *Early symptoms can include fever, headache, nausea (feeling sick), vomiting (being sick), and muscle pain, with cold hands and feet.*	• *Airway management.* • *GCS.* • *Vital signs.* • *Medical assessment* • *Close ongoing neurological assessment.*
Sinusitis	• *Pain or pressure behind the eyes/across the cheek bones/forehead/bridge of the nose.* • *Headache.* • *+/-Fever.* • *Nasal discharge.*	• *Analgesia.* • *GCS.* • *Vital signs.* • *Medical assessment.* • *Antibiotics.* • *Hydration.* • *Close ongoing neurological assessment.*
Headache	*Throbbing in head.*	• *Analgesia.* • *GCS.* • *Vital signs.* • *Medical assessment.* • *+/- IV fluids* • *Close ongoing neurological assessment.*
Migraine	• *Intense throbbing headache, often on one side of the head only.* • *Visual disturbances (blind spots, distorted vision, flashing lights or zigzag patterns) – these symptoms are often called aura.* • *Nausea and or vomiting or diarrhoea.* • *Increased sensitivity to light (photophobia).* • *Increased sensitivity to sounds (phonophobia).* • *Increased sensitivity to smells (osmophobia).* • *Stiffness of the neck and shoulders.*	• *Analgesia.* • *GCS.* • *Vital signs.* • *Medical assessment.* • *+/- IV fluids.* • *Largactil.* • *Anti emetic if vomiting.* • *Close ongoing neurological assessment.*

3.7 EXPOSURE AND ENVIRONMENT

ACTIVITY 37

Discuss the physiological effects of hypothermia in the trauma patient.

Discuss with participant.

Hypothermia causes a shift to the left on the oxyhaemoglobin dissociation curve (Hb has a greater affinity for O_2 but decreased affinity at the tissues). This in turn contributes to a metabolic acidosis.

The body requires a normal temperature for the synthesis of proteins. All clotting factors are proteins and therefore will not be synthesised, leading to coagulopathy.

Platelets are inactivated in hypothermia, contributing to bleeding.

ACTIVITY 38

What is active warming?

The use of internal and external techniques such as warmed gas ventilation, administration of warm intravenous fluids; gastric, bladder, peritoneal and pleural lavage; and extracorporeal circuits such as haemofilters or cardiopulmonary bypass to warm a patient who is hypothermic.

What is passive warming?

The process of removing wet clothing, providing the patient with warm drinks and using blankets to warm a patient.

Discuss with participant.

3.8 PAIN

ACTIVITY 39

To help you complete this module and gain a greater understanding of pain pathophysiology, review the pain chapter of any anatomy and physiology textbook.

Discuss any questions the participant may have.

ACTIVITY 40

Name two examples of acute pain and chronic pain that you have witnessed.

What was the cause of the patient's pain?

How was the pain managed in each instance?

To complete this activity, refer to:

http://www.frca.co.uk/article.aspx?articleid=100118.

CIAP: http://www.use.hcn.com.au/frame.%60$I1%60/home.html?I1=etgc%2Fagg%2F786.htm

Discuss with participant.

ACTIVITY 41

Complete any education and training required for nurse initiated analgesia in your department (according to facility).

Facilitate any education and training required.

ACTIVITY 42

In the table below, identify the analgesics commonly used in your emergency department. Fill in the blank spaces regarding the correct dose, how the drug works, contraindications and nursing responsibilities.

Discuss with participants to ensure understanding and learning.

NON OPIOID

Name of Drug	Dose range and route	Action	Contra-indications	Special nursing considerations	Other analgesics identified
Paracetamol	500-1000 mg Oral, IV, PR Children: 15mg/kg	Analgesic Antipyretic	Hepatic impairment	Rectal absorption can be erratic	
NSAIDs eg ibuprofen	200-400 mg Oral Children: 10mg/Kg	Anti-inflammatory	GI Ulcer Antihypertensive medications Cardiac, renal and hepatic impairment	Take dose shortly after food	
Aspirin	300-600mg Oral	Analgesic Antipyretic Anti-inflammatory Antiplatelet	Active upper GI bleed	Asthma: risk of bronchospasm is increased in patients with aspirin – precipitated asthma. Children or teenagers with chickenpox, influenza, fever, children < 12 years of age.	

OPIOID

Name of Drug	Dose range and route	Action	Contra-indications	Special Nursing Considerations	Other analgesics identified
Morphine	0.1-0 .2 mg/kg IMI, IV, SCI	Opioid analgesic	Renal, hepatic impairment	Respiratory depression Constipation Nausea and vomiting	
Codeine	30-60 mg Oral, IMI, SCI	Opioid analgesic	Renal, hepatic impairment	Respiratory depression Constipation Nausea and vomiting	
Tramadol	50-100mg Oral, IV, IMI	Binds to mu opioid receptors and also inhibits reuptake of noradrenaline and serotonin	Renal, hepatic impairment	Headache, CNS stimulation, weakness, sweating, sleep disorder, dyspepsia, itch, rash.	
Oxycodone	5-15 mg Oral	Opioid analgesics mimic endogenous opioids by activating opioid receptors in the central and peripheral nervous systems to produce analgesia	Hepatic, renal impairment, elderly, debility	Nausea, vomiting, dyspepsia, drowsiness, dizziness, headache, orthostatic hypotension, itch, dry mouth, miosis, urinary retention, constipation	
Fentanyl	50-100 micrograms IV, IMI Children: 0.5-2 mg/kg	Opioid analgesics mimic endogenous opioids by activating opioid receptors in the central and peripheral nervous systems to produce analgesia	Hepatic, reanl, severe respiratory impairment.	Short acting analgesic, nausea, vomiting and constipation.	

3.9 TRAUMA

ACTIVITY 43

Discuss with participant.

Complete the table below by discussing how blood loss in each body area may be identified and what interventions/definitive care would be required to STOP the bleeding.

Region of blood loss	How to identify bleeding	Intervention/management
Thorax	***Clinical assessment:*** *Decreased symmetry* *Increased work of breathing* *Decreased air entry* *Signs of shock:* *• tachycardia,* *• hypotension,* *• cool,* *• diaphoretic,* *• prolonged capillary refill* ***CXR:*** *Blood will pool posteriorly in the supine patient, leading to a 'white out' or water density within the affected lung. The lung and cardiac border will merge together, obscuring the cardiac border.* *In the erect-positioned patient, the affected haemothorax will demonstrate a 'fluid level' and blunting of the costophrenic angle as fluid will pool at the base of the lung.* ***CT*** *scan can be performed*	*• Oxygen* *• IV access* *• Bloods including X-match, Group & hold* *• Chest drain* *• Fluid replacement and treatment of shock* *• Ongoing clinical assessment*
Abdomen	***Clinical assessment:*** *Hypotension* *Tachycardia* *Abdominal distention* *Bruising* *Pain* *Rigidity* *Guarding* ***Investigations:*** *FAST scan positive* *Diagnostic Peritoneal Lavage* *CT scan*	*• IV access* *• Bloods including X-match, Group & hold* *• Fluid replacement as required* *• +/- surgical intervention*
Retro-peritoneum	*Hypotension* *Tachycardia* *# pelvis and haemodynamic instability – consider blood in retroperitoneum*	*• IV access* *• Bloods including X-match, Group & hold* *• Fluid replacement as required* *• Splinting of pelvis with sheet if pelvic # is suspected* *• Embolisation +/fixation if unstable pelvic #*

Activity 43 table (Cont'd)

Long bones	*Clinical examination:* *Deformity* *Swelling* *Pain* *Bleeding* *X-ray confirmation of #*	*• IV access* *• Bloods including X-match, Group & hold* *• Fluid replacement as required* *• Analgesia* *• Consider femoral nerve block for femur #* *• Splinting/traction* *• Neurovascular observations* *• Surgical intervention*
External bleeding	*Clinical assessment:* *Visualise blood loss* *Hypotension* *Tachycardia*	*• Bloods including X-match, Group & hold* *• Fluid replacement as required* *• Pressure to site* *• Suture/staple*

Assist participant to conduct a primary and secondary survey on appropriate trauma patient.

3.10 BURNS

ACTIVITY 44

Q1. Read the following Clinical Practice guidelines: Burn Wound Management 2008 available at
http://www.health.nsw.gov.au/resources/gmct/burninjury/pdf/clinical_practice_guidelines.pdf
Discuss airway assessment of a patient who has presented with burns?

Discuss with participant.

Airway maintenance with cervical spine control.

Inspect the airway for foreign material/oedema. If the patient is unable to respond to verbal commands open the airway with a chin lift and jaw thrust; stabilize neck for suspected C Spine injury.

Keep movement of the cervical spine to a minimum and never hyper flex or hyperextend the head or neck.

Insert Guedels airway if airway patency is compromised. Think about early intubation.

Q2. Describe the referral process for transferring patients with burn injuries in your emergency department.

As per local policy.

ACTIVITY 45

Read the following Clinical Practice Guidelines: Minor Burn Management 2008

http://www.health.nsw.gov.au/resources/gmct/burninjury/pdf/minor_burn_management.pdf

Discuss with participant as required.

ACTIVITY 46

Read the NSW Health policy on which patients require transfer to a specialised burns unit.
http://www.health.nsw.gov.au/policies/gl/2008/GL2008_012.html

Discuss with participant as required.

3.11 ASSAULT

ACTIVITY 47

Read your local policy on forensic evidence collection so that you are aware of the procedures in your department.

As per individual emergency department – discuss with participant.

ACTIVITY 48

Review your facility's policy/procedure for the management of sexual assault presentations and briefly discuss.

Discuss with participant. As per local policy.

ACTIVITY 49

Discuss with your facilitator or support person, consent and issues related to forensics for a sexual assault victim?

Discuss with participant. As per local policy.

ACTIVITY 50

Q1. Who can perform a forensic medical examination on a sexual assault patient?

Discuss with participant.

Trained sexual assault forensic examiners are required to carry out timely forensic and general examinations on patients. The examiners may be either nurses or medical officers who have attended specialist training. Training requirements include knowledge of the NSW Health Sexual Assault Services Policy And Procedure Manual (Adult) PD2005_67 (NSW Health, 2005).

Q2. Who can witness a forensic medical examination?

Discuss with participant.

Patients must be offered the opportunity to have a support person of their choice present during the forensic examination (NSW Health, 2005). The counsellor may act as both a support person for the patient and as a witness to the examination. If the support person is not employed by a Health Service Act as a witness to the examination, an appropriate Health Service employee will need to act and sign as a witness for the examination.

ACTIVITY 51

As an emergency nurse, what do you do if a patient discloses domestic violence? Investigate the referral and support process available in your emergency department.

Discuss with participant. As per individual emergency department.

ACTIVITY 52

Discuss the effects of domestic violence relating to children, what are the requirements for mandatory reporting? Familiarise yourself with the legislation in relation to child protection.

Discuss as required or appropriate.

3.12 ELDERLY

ACTIVITY 53

Describe the clinical considerations relevant to elderly patients with regard to each system.

Discuss with participant.

Decreased biting force and brittle due to reduction in enamel. They may even have false teeth in situ. These should remain in situ unless they are loose or pose a threat to the airway.

An increase in residual lung volume.

Muscle atrophy and rigidity.

Thickened membranes, alveoli and capillaries

Diminished salivary production and alteration in taste.

A diminished gag reflex.

ACTIVITY 54

Find out about what community services are available in your area that may address some of the needs of elderly people.

Discuss. As per local area.

ACTIVITY 55

What factors need to be considered prior to the discharge of an elderly patient?

Discuss with participant.

Is the patient going home to an empty house?

Does the patient have a support person who can check to see if they are safe? For example: neighbour, relative or firend?

Will the patient be able to be independnent in activities of daily living?

Do they require additional or services to be arranged prior to discharge?

Is it safe to send the patient home? Consider the time of night and area in which they live. Is it safe to send them home?

Can someone pick them up? Can this person also pick up any groceries and toher requirements if necessary?

Do they have all the appropriate paperwork prior to discharge?

Do they have the keys to their home?

If admitted do they have any pets that will require looking after?

3.13 OBSTETRICS AND GYNAECOLOGY

ACTIVITY 56

Locate the Maternity Emergency Guidelines for Registered Nurses in your department (written by The Australian College of Midwives NSW Branch Inc. – formally known as NSW Midwives Association) and familiarise yourself with the contents.

Discuss with participant.

ACTIVITY 57

Locate and familiarise yourself with your local policy on management of patients presenting with pain and bleeding in early pregnancy.

Discuss. As per local individual emergency department and NSW Health Policy.

3.14 SEXUAL HEALTH

ACTIVITY 58

Go to the link below to familiarise yourself with the symptoms and treatment of STI's
http://www.health.nsw.gov.au/publichealth/sexualhealth/sex_factsheets.asp.

Discuss with participant.

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3.15 MENTAL HEALTH

ACTIVITY 59

What plans do you have in place in your emergency department to manage mental health patients? Include in your response the physical environment, resources such as clinical roles, safe rooms and local guidelines for these patients.

Discuss. As per individual emergency department policy and guidelines.

3.16 DRUGS AND ALCOHOL

ACTIVITY 60: Benzodiazepines

Discuss with participant as required or appropriate.

Q1:What does the onset and duration of benzodiazepine withdrawal depend upon?

Length of time used.
Amount used.
Concurrent use of benzodiazepines, i.e. alcohol and opiates.
The type of benzodiazepine used.

Q2. List five side effects of the benzodiazepines.

Sedation.
Reduced co-ordination.
Muscle weakness.
Depression.
Dry mouth.
Lethargy and fatigue.
Memory loss.

ACTIVITY 61: Stimulants

Discuss with participants as required or appropriate.

Q1. What are the effects of stimulants?

Euphoria, increased energy, over-confidence.
Suppressed appetite.
Increased psychomotor performance, increased talkativeness.
Jaw clenching, sweats, rapid or irregular heart rate.

Q2. Describe the principles of managing amphetamine withdrawal.

Treat symptomatically as symptoms arise.
Hydration and nutrition.
Most withdrawal symptoms disappear after two weeks to a month.
Other strategies include support groups, relaxation techniques, sleep, hygiene, counselling.

Q3. What nursing actions would you take if one of your patients started displaying psychotic symptoms?

Monitor patient.
Request medical review – patient may require further medication.
Inform colleagues.
Stay with patient and remove any equipment that may be used as a weapon. Ensure patient, self and others' safety.
Remain calm, reassure patient. Try to reduce stimulation in the patient's room (ie maintain low noise levels, reduce number of staff, restrict visitors).

3.17 PAEDIATRICS

ACTIVITY 62

The Clinical Excellence Commission has undertaken intensive work on the care of children and young people in emergency departments. This has led to the development of an extensive Paediatric Emergency Guideline Training Package which you are expected to access and complete via http://doh.edmore.com.au. It is free to register.

Ask the participant to show you their quiz results from the exercise and discuss as required.

4 Sample lesson plans

This section contains a number of sample lesson plans for use by facilitators as required. Additional plans may be included at the local level.

4.1 ORIENTATION

Aim

The aim of the Emergency Department Essentials orientation is to integrate and socialize clinicians into the emergency department environment. Local Health Districts may choose to use pre-existing orientation programs where content is equivalent to those outlined within this document. Governance processes currently used by Local Health Districts are required to ensure the individual has completed orientation requirements.

All participants new to an organisation are expected to attend and complete the mandatory requirements of corporate and nursing orientation. In addition to the standardised orientation program the transition to speciality practice nurse will be required to complete unit specific orientation ~ Emergency Department Essentials.

Learning Outcomes

At the completion of this section the participant will be able to;

• Identify the context of Emergency Department care within the health care continuum.
• Outline the core concepts of triage.
• Recognise the various Emergency Department models of care used within your Emergency Department.
• Identify the various teams and their purpose within your Emergency Department.
• Apply the elements of duty of care.

Content

• Integrated Care.	• Equipment.
• Departmental layout.	• Documentation/Communication.
• Models of Care.	• Mandatory Reporting.
• Patient Flow.	• Occupational Health and Safety.
• Local Policies and Procedures.	

Facilitator Activities/Modalities

• Search and Find.
• Experienced Learning.
• Self Directed Learning.
• Models of Care www.arch.net.au/e-library/build/moc/implementing_emoc

Resources

• NSW Health *'Models of Care'* http://www.health.nsw.gov.au/nursing/projects/models_of_care.asp
• http://www.health.nsw.gov.au/pubs/2006/models_of_care.html
• http://www.health.nsw.gov.au/policies/PD/2005/pdf/PD2005_004.pdf
• Australian Government Department of Health and Ageing (2007) Emergency triage education kit. Page 6
• http://www.drinkingnightmare.gov.au/internet/main/publishing.nsf/Content/casemix-ED-Triage+Review+Fact+Sheet+Documents
• CENA, Standards for the Emergency Nurse Specialist. 2008, CENA: Sydney. http://www.cena.org.au/
• National Specialisation Framework for Nursing and Midwifery (2006) (Australian Government Department of Health and Ageing, 2007: VII)
• http://www.nursingandmidwifery.gov.au

4.2 PATIENT ASSESSMENT

Aim

Emergency nurses provide care for patients of all ages with diverse clinical presentations. To ensure good patient outcomes, it is imperative to have a systematic approach to assessing the emergency patient. The learning outcomes for this module have been designed to enable participants to gain a greater understanding of the fundamental patient assessment principles.

Learning Outcomes

By completing this section, the participant will be able to:
- Perform a primary and secondary survey, using a systematic approach.
- Identify life threatening injuries or conditions during a primary survey and initiate appropriate interventions.
- Perform a relevant and appropriate subjective assessment.
- Recognise clinical indicators of urgency called 'red flags' in the patient history.
- Demonstrate review and re-assessment of clinical findings and management interventions & escalate appropriately.
- Document assessment findings in the patient's progress notes.
- Discuss barriers to assessment that may be encountered in Emergency Department.

Content
- Look, Listen and Feel.
- Inspection, palpation, auscultation, percussion.
- Primary Survey
  - Airway Assessment
  - Breathing assessment
  - Circulation assessment
  - Disability assessment.

- Secondary Survey
  - Exposure & Environment
  - Family and Formal Set of Vitals
  - Gadgets/gather Pathology
  - History and Head to Toe
  - MIST mnemonic for trauma patients
  - Ample mnemonic.

Suggested Modalities
- Simulation.
- Role play.
- Tutorial.
- DVD – e.g. 'Physical assessment for nurses: A practical approach' (College of Nursing).
- Experiential Learning.

Facilitator Activities

The following activities have been designed to further develop participant knowledge of patient assessment and nursing interventions. The facilitator may use any, or all of the outlined activities to achieve the modules aim. Alternatively facilities may choose to use other outlined modalities.

Option 1: Role Play
The aim of this activity is to provide participants with an opportunity to conduct a comprehensive patient assessment and receive performance feedback in a controlled simulation environment.

Participants are divided into groups of two. Each participant is allocated a role of either patient or nurse. Roles are then reversed and feedback about the process/activity provided.

• Patient Role: The participant is given a medical history and set of symptoms which they must exhibit.
• Nurse Role: The participant uses the ABCDEFGHIJ, MIST and AMPLE mnemonic to:
    1. Assess the patient.
    2. Identify life threatening injuries or conditions during the primary survey and initiate appropriate interventions.
    3. Using a mock set of notes document appropriately.

Option 2: Case Study
Participants are given a case study and are asked to identify in the patient history clinical indicators of urgency and identify appropriate nursing interventions.

Option 3: Brainstorming
The aim of this activity is to discuss challenges that may be encountered in the Emergency Department and identify actions from identified challenges.

Participants are broken up into small groups and asked to discuss within the context of the emergency department challenges that they may face when conducting a patient assessment. Participants are then required to identify actins from the identified challenges. Each small group describes challenges and actions and then presents information back to the larger group for wider discussion.

Expected Timeframe – 60 minutes

4.3 AIRWAY ASSESSMENT & MANAGEMENT

Aim
The participant will on completion of this module be able to competently assess and manage a patient presenting to the emergency department with a compromised airway.

Learning Outcomes
By completing this section, the participant will be able to:
• Demonstrate the process of airway assessment and recognition of a compromised airway.
• List the causes of airway obstruction.
• Identify common clinical presentations requiring urgent airway assessment and management.
• Perform Airway opening manoeuvres.
• Demonstrate techniques for clearing the airway and inserting airway adjuncts.
• Demonstrate effective Bag – valve - mask ventilation.
• Identify mechanisms of injury which would indicate cervical spine vulnerability.
• Correctly measure and apply cervical spine immobilisation devices.
• Describe a variety of patients presenting to Emergency which require intubation.

Content
• Causes of airway obstruction.
• Clinical presentations requiring urgent airway assessment and management.
• Airway assessment – Look, Listen and Feel.
• Causes of airway obstruction.
• Common clinical presentations requiring urgent airway assessment and management
  - Choking Patient
  - Anaphylaxis's.

- Airway management
  - Airway opening manoeuvres
    ◦ Clearing of the airway
    ◦ Insertion of airway adjuncts
    ◦ Measuring of airway adjuncts
  - Cervical spine Immobilisation
  - Bag – valve – mask ventilation
  - Intubation.

Suggested Modalities
- Self Directed learning.
- Modified lecture.
- Demonstration.
- Simulation.
- Role play.
- Experiential Learning.

Facilitator Activities
The following activity has been designed to further develop participant knowledge of respiratory assessment and associated nursing interventions. The facilitator may use this activity to achieve the modules aim or alternatively facilities may choose to use other outlined modalities.

Option 1: Simulation
Using a simulation mannequin participants demonstrate head tilt, chin lift, jaw thrust, and insertion of airway adjuncts. On completion of the exercise participants are debriefed and an opportunity for feedback provided.

Expected Timeframe: 90 minutes

References/Resources
- American College of Surgeons Committee on Trauma (2008) *'Advanced Trauma Life Support for Doctors ATLS Student Course Manual'* 8th Ed. Chicago
- Colleton, L.G (2008) *'Beyond The Stethoscope: Respiratory Assessment Of The Older Adult'*, Nursing Made Incredibly Easy, Sep/Oct 6,5 11-14
- Chestnutt, M.S, Gifford, A.H. & Prendergast.T.J (2009) *'Pulmonary Disorders'* in McPhee, S.J. & Papadakis, M.A. (ED's) Current Medical Diagnosis and Treatment. McGraw-Hill; USA
- Cretikos, M.A., Bellomo, R., Hillman, K. Finfer, S. & Flabouris, A. (2008) *'Respiratory Rate: The Neglected Vital Sign'*, MJA 188(11):657-659.
- Crummy, F. & Naughton, M.T. (2006). *'Non- Invasive positive pressure ventilation for acute respiratory failure: justified of just hot air?'* Internal Medicine Journal (2007) 37, 112-118.
- De la Pena, E., & Altman, G.B. (2004) *'Measuring Peak Expiratory Flows'* in Delmar Fundamental & Advance Nursing Skills, 2nd ed. Delmar Learning: USA.
- *'Diffusion of Gases'* [Image] (n.d) Retrieved 3 May 2009 from http://www.pdh-odp.co.uk/Swot%20of%20Gases.htm
- *'Funnel Chest'* [Image] (n.d.) Retrieved 5 May 2009 from http://www.kinderchirurgiewillital.de/triburst/05a.jpg
- Gomella, L.G & Haist, S.A (2007). *'Clinicians Pocket Reference'* 11th Ed. McGraw-Hill: USA
- Hanley, M.E. & Welsh, C.H. (2003) *'Current Diagnosis & Treatment in Pulmonary medicine'*, McGraw-Hill: USA
- *'Kyphotic spine'* [Image] (n.d.) Retrieved 5 May 2009 from http://www.crosbyclinic.im/images/kyphosis.jpg

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- *Larynx* [Image] (n.d) Retrieved 5 May from http://www.biologycorner.com/.../resp_images.html

- LeBlond, R.F, Brown, D.B, DeGowin, R.L (2009) *'DeGowins Diagnostic Examination'*, 9th Ed. McGraw-Hill:USA.

- Levitzky, M.G. (2007) *'Pulmonary Physiology'*, 7th ed. McGraw-Hill: USA

- Moore, T. (2007) *'Respiratory assessment in adults'*, Nursing Standard. 21, 49, 48-56

- National Asthma Council (2006) *'Asthma Management Handbook'*, National Asthma Council Australia LTD. Melbourne

- *'Nose'* [Image] (n.d) Retrieved 3 May 2009 from http://www.web-books.com/.../Respiratory.htm

- *'Pharynx'* [Image] (n.d) Retrieved 4 May 2009 from http://www.commons.wikimedia.org/wiki/File:Pharynx_diagr

- Penuelas, O. Frutos_Vivar, F. Esteban, A CMAJ. Nov 6, 2007; 177 (10). Accessed on 12 May 2009 at http://www.cmaj.ca/cgi/content/full/177/10/1211

- *'Pigeon Breast'* [Image] (n.d.) Retrieved 5 May 2009 from http://www.healthcentral.com/ency/fullsize/9011.jpg

- Porth, C.M. (2006) *'Patho-physiology Concepts of Altered Health States'*, 4th Ed JB Lippincott: USA

- Pruitt, W.C. (2003) *'Breathing Lessons: Basics of Oxegen Therapy'*, Nursing 2009 33(10), Oct, p43-45.

- Seidel, H.M., Ball, J.W., Dains, J.E., Benedict, G.W (2006) *'Mosbys Guide to Physical Examination'*, Elseveir: USA

- *Shape of the Thorax* [Image] (n.d) Retrieved 5 May from www.wrongdiagnosis.com/bookimages/16/5373.1pngAccessed

- *'Suprasternal Notch'* [Image] (n.d) retrieved 5 May 2009 from http://www.wrongdiagnosis.com

- *'The Bronchioles'* [Image] (n.d) Retrieved 3 May 2009 from http://www.medical-dictionary.thefreedictionary.com/bron...

- Tintinalli, J.E., Gabor M.S, Kelen, D., Stapczynski, J.S, Ma O.J, & Cline, D.M (2004) *'Tintinalli's Emergency Medicine: A Comprehensive Study Guide'*, McGraw-Hill: USA

- *'Trachea'* [Image] (n.d.) Retrieved 5 May 2009 from http://www.library.thinkquest.org/5777/resp3.htm

- Urden, L.D., Stacy K.M. & lough, M.E (2006) *'Urden: Thelans Critical Care Nursing: Diagnosis and Management'*, Elsevier; USA

4.4 BREATHING

Aim

The participant will on completion of this module be able to competently assess and manage a patient presenting to the emergency department with compromised breathing.

Learning Outcomes

By completing this section, the participant will be able to:

• Describe the normal principles of respiratory anatomy and physiology.
• Take a comprehensive medical (respiratory) history.
• Demonstrate basic skills in performing a respiratory assessment including inspection, auscultation, palpation and percussion.
• Describe the common adventitious sounds that maybe heard on auscultation.
• Interpret the clinical findings of an assessment of a patient with a breathing disorder including their purpose.
• Identify normal arterial blood gas parameters.
• Demonstrate the use of a peak flow meter and/or spirometer.
• Have a greater understanding of chronic lung diseases and conditions that may have acute exacerbations such as emphysema, asthma and chronic bronchitis.
• Have a greater understanding of pathology in otherwise normal lungs resulting in acute shortness of breath, pulmonary embolism, pneumonia, pneumothorax and atelectasis.
• Describe the common oxygen delivery devices including the flow per minute and fraction of inspired oxygen delivered.
• Identify the indications for NIPPV.
• Describe the nursing considerations when caring for a patient on NIPPV.
• Demonstrate setting up of an underwater seal drainage system.
• Describe the mode of actions, indications and potential side effects of the common medications used to treat patients with a respiratory disorder.

Content

• Anatomy and physiology.
• Conducting a comprehensive respiratory assessment/history
   - Inspection, palpation, auscultation, percussion
   - Taking a medical history
   - Interpretation of clinical assessment findings.
• Common diagnostic tools used to assess a patient with a breathing disorder
   - Pulse oximetry
   - Spirometry
   - Peak flow
   - Chest X-Ray
   - Rationale for the use of diagnostic tools, interpretation of results and escalation/management
   - How to use a peak flow meter and/or spirometer.
• Common oxygen delivery devices
   - Hudson mask, nasal cannulae, venturi mask, non-rebreather
   - Flow per minute and fraction of inspired oxygen delivered for common oxygen devices for common oxygen delivery devices.
• Rationale, indications and special precautions of using NIPPV
   - What is NIPPV
   - Indications for NIPPV
   - Nursing considerations when caring for a patient with
   - NIPPV
   - UWSD.

Suggested Modalities
• Self Directed Learning.
• Modified lecture.
• Demonstration.
• Simulation.
• Role play.
• Case Studies.
• Experiential Learning.

Facilitator Activities
The following activities have been designed to further develop participant knowledge of respiratory assessment and associated nursing interventions. The facilitator may use any, or all of the outlined activities to achieve the modules aim. Alternatively facilities may choose to use other outlined modalities. Facilitators may incorporate a number of activities together (skills stations) or alternatively conduct activities separately.

Option 1: Role Play
• Participants are broken up into pairs. Each participant is required to ausculate their partner, listening for normal breath sounds, and states their findings. On completion of the exercise participants are debriefed and an opportunity for feedback provided.
• Participants are broken up into pairs. Each participant is given a case history inclusive of diagnosis and relevant treatment options. Their partner is required to take a comprehensive medical history and institute required nursing treatments – roles are then reversed, participants are debriefed and an opportunity for feedback provided.

Option 2: Simulation
• Participants are required using a simulation mannequin to identify adventitious breath sounds and discuss with the facilitator their findings.
• Using a simulation mannequin participants demonstrate head tilt, chin lift, jaw thrust, and insertion of airway adjuncts.

Option 3: Auscultation Library
This self directed learning opportunity allows the participants to hear adventitious breath sounds whilst reading easy to read resource material.
http://www.cvmbs.colostate.edu/clinsci/callan/breath_sounds.htm

Option 4: Case Studies
Participants are divided into small groups and are given several case studies. Within the case studies participants are required to;
• Identify the clinical indicators of urgency and identify appropriate nursing interventions.
• Analyses ABGs.
• Identify appropriate oxygen delivery device and provide rationale for its use

Expected Timeframe: Eight – sixteen hours

References/Resources
• American College of Surgeons Committee on Trauma (2008) *'Advanced Trauma Life Support for Doctors ATLS Student Course Manual'* 8th Ed. Chicago
• Colleton, L.G (2008) *'Beyond The Stethoscope: Respiratory Assessment Of The Older Adult'*, Nursing Made Incredibly Easy, Sep/Oct 6,5 11-14
• Chestnutt, M.S, Gifford, A.H. & Prendergast.T.J (2009) *'Pulmonary Disorders'* in McPhee, S.J. & Papadakis, M.A. (ED's) Current Medical Diagnosis and Treatment. McGraw-Hill; USA
• Cretikos, M.A., Bellomo, R., Hillman, K. Finfer, S. & Flabouris, A. (2008) *'Respiratory Rate: The Neglected Vital Sign'*, MJA 188(11):657-659.

- Crummy, F. & Naughton, M.T. (2006). *'Non- Invasive positive pressure ventilation for acute respiratory failure: justified of just hot air?'* Internal Medicine Journal (2007) 37, 112-118.

- De la Pena, E., & Altman, G.B. (2004) *'Measuring Peak Expiratory Flows'* in Delmar Fundamental & Advance Nursing Skills, 2nd ed. Delmar Learning: USA.

- *'Diffusion of Gases'* [Image] (n.d) Retrieved 3 May 2009 from http://www.pdh-odp.co.uk/Swot%20of%20Gases.htm

- *'Funnel Chest'* [Image] (n.d.) Retrieved 5 May 2009 from http://www.kinderchirurgiewillital.de/triburst/05a.jpg

- Gomella, L.G & Haist, S.A (2007). *'Clinicians Pocket Reference'* 11th Ed. McGraw-Hill: USA

- Hanley, M.E. & Welsh, C.H. (2003) *'Current Diagnosis & Treatment in Pulmonary medicine'*, McGraw-Hill: USA

- '*Kyphotic spine'* [Image] (n.d.) Retrieved 5 May 2009 from http://www.crosbyclinic.im/images/kyphosis.jpg

- *Larynx* [Image] (n.d) Retrieved 5 May from http://www.biologycorner.com/.../resp_images.html

- LeBlond, R.F, Brown, D.B, DeGowin, R.L (2009) *'DeGowins Diagnostic Examination'*, 9th Ed. McGraw-Hill:USA.

- Levitzky, M.G. (2007) *'Pulmonary Physiology'*, 7th ed. McGraw-Hill: USA

- Moore, T. (2007) *'Respiratory assessment in adults'*, Nursing Standard. 21, 49, 48-56

- National Asthma Council (2006) *'Asthma Management Handbook'*, National Asthma Council Australia LTD. Melbourne

- *'Nose'* [Image] (n.d) Retrieved 3 May 2009 from http://www.web-books.com/.../Respiratory.htm

- *'Pharynx'* [Image] (n.d) Retrieved 4 May 2009 from http://www.commons.wikimedia.org/wiki/File:Pharynx_diagr

- Penuelas, O. Frutos_Vivar, F. Esteban, A CMAJ. Nov 6, 2007; 177 (10). Accessed on 12 May 2009 at http://www.cmaj.ca/cgi/content/full/177/10/1211

- *'Pigeon Breast'* [Image] (n.d.) Retrieved 5 May 2009 from http://www.healthcentral.com/ency/fullsize/9011.jpg

- Porth, C.M. (2006) *'Patho-physiology Concepts of Altered Health States'*, 4th Ed JB Lippincott: USA

- Pruitt, W.C. (2003) *'Breathing Lessons: Basics of Oxegen Therapy'*, Nursing 2009 33(10), Oct, p43-45.

- Seidel, H.M., Ball, J.W., Dains, J.E., Benedict, G.W (2006) *'Mosbys Guide to Physical Examination'*, Elseveir: USA

- *Shape of the Thorax* [Image] (n.d) Retrieved 5 May from www.wrongdiagnosis.com/bookimages/16/5373.1pngAccessed

- *'Suprasternal Notch'* [Image] (n.d) retrieved 5 May 2009 from http://www.wrongdiagnosis.com

- *'The Bronchioles'* [Image] (n.d) Retrieved 3 May 2009 from http://www.medical-dictionary.thefreedictionary.com/bron...

- Tintinalli, J.E., Gabor M.S, Kelen, D., Stapczynski, J.S, Ma O.J, & Cline, D.M (2004) *'Tintinalli's Emergency Medicine: A Comprehensive Study Guide'*, McGraw-Hill: USA

- *'Trachea'* [Image] (n.d.) Retrieved 5 May 2009 from http://www.library.thinkquest.org/5777/resp3.htm

- Urden, L.D., Stacy K.M. & lough, M.E (2006) *'Urden: Thelans Critical Care Nursing: Diagnosis and Management'*, Elsevier; USA

4.5 EXPOSURE AND ENVIRONMENT

Aim

The participant will on modules completion have gained a greater understanding of how to within the emergency department assess a patient for exposure and environment.

Learning outcomes

By completing this section, the participant will have gained a greater understanding of:

• The importance of removing clothing for assessment.
• How to preserve and document clothing requires for forensic evidence.
• How to inspect surfaces for,
   - Colouration, texture and temperature of the skin surface
   - Areas of deformity
   - Pain
   - Skin Integrity.
• How the external environment influences nursing interventions and patient care requirements.

Content

• Removal of clothing.
• Forensics.
• Inspection of surfaces.
• Assessment of rash.
• Temperature/hypothermia.
• Environment.

Suggested Modalities

• Self Directed Learning.
• Modified lecture.
• Demonstration.
• Case Studies.
• Experiential Learning.

Expected Timeframe: 30 minutes

References/Resources

• Aitkin LM, Hendrikz JK, Dulhunty JM, Rudd MJ (2009) *'Hypothermia and associated Outcomes in Seriously Injured trauma Patients in a Predominantly Sub Tropical Climate'* Resuscitation 80 pp217-223.
• http://www.meningococcal-australia.org.au/index.html
• http://www.health.nsw.gov.au/policies/PD/2005/pdf/PD2005_383.pdf
• http://www.ncbi.nim.nih.gov/pubmed/8604866?dopt=Citation
• http://www.health.nsw.gov.au/polocies/PD/20http://www.ncbi.nim.nih.gov/pubmed/8604866?dopt=Citation
• 05/pdf/PD2005_383.pdf
• http://www.thecorrect.com/medical-emergency/primary-survey-of-resuscitation.html

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4.6 PAIN

Aim

The participant will by module completion gain a greater understanding of pain assessment & management principles.

Learning Outcomes

Participant will on program completion be able to
• List the physiological symptons of pain.
• Competently assess pain using the numerical pain and visual analogue scale.
• Describe different types of analgesia, indications/contraindications.
• Discuss analgesia treatment regimes.

Content
• Physiological symptons of pain.
• How to assess pain – using the VAS & Numerical pain scale, patient history, clinical signs and symptons.
• Types of analgesia, indications & contraindications.
• Analgesia treatment regimes – contributing factors, providing too much/not enough analgesia.

Suggested Modalities
• Self Directed Learning.
• Modified lecture.

Expected Timeframe: 60 minutes

References/Resources
• Duignan, m. & Dunn, V., Congruence of pain assessment between nurses and the emergency department patients: A replication. Internation Emergency Nursing (2008) 16, 23-28 (online).
• http://emergencycare.nhmrc.gov.au/blog/files/Congruence%20of%20pain%20assessment%20 nurses%20and%20emergency%20department%patients.pdf.pdf
• Newton, A. 2007. Pain (assessment and management of), NHS Evidence (online)
• http://www.library.nhs.uk/Emergency/ViewResources.aspx?resID=266669
• http://painsourcebook.ca/pdfs/fps-r-multilingual-instrucyions-mar09.pdf

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5 Clinical skills assessments

The following are some clinical skills assessments. These will need to be undertaken with an agreed assessor who will be able to sign when you achieve mastery. This is not an exhaustive list of clinical skills that you may learn or undertake in the Emergency setting and you and/or your facilitator may add more to this section.

5.1 PRIMARY SURVEY – AIRWAY

A Airway Assessment	Assessment Tips	Yes	No
Look	**Is the airway patent?** **Look for:** • Foreign bodies, obstruction or partial obstruction, broken or dislodged teeth or dentures. • Injury – traumatic or inhalation. • Bleeding or swelling inside the mouth. • Secretions – blood, vomit, sputum, food, soot. • Soft tissue injury to face or neck, facial fractures, burns (Singed facial /nasal hairs). • Difficulty swallowing. • Angioedema (oedema in the mucosal membrane). • Drooling.		
Listen	**Listen for:** • Is there any airway noises? (stridor, gurgling or hoarseness of voice etc.)		
Feel	**Feel for:** • Expired air.		
Mastery		**Yes**	**No**
Assessor's Name and Designation:			
Assessor's Signature:			
Date:			
Comments:			

INTERVENTIONS – AIRWAY

Clinical Skill	Date Mastery Achieved	Name, designation and signature of Assessor
Jaw thrust		
Head tilt/chin lift		
Oropharyngeal airway insertion – guedels		
Nasopharyngeal airway insertion		
Assisting in intubation (optional – dependent of facility requirements).		
Suctioning techniques		

5.2 PRIMARY SURVEY – BREATHING

B Breathing Assessment	Assessment Tips	Yes	No
Look	The chest must be fully visualised for examination. **Look for:** • Spontaneous respirations. • Symmetrical rise and fall of the chest. • The rate, rhythm and depth of respirations. • Any accessory muscle use: intercostal/subcostal retractions, abdominal muscle usage, excessive nasal flaring, pursed lips, tracheal tug or tracheal deviation. • Paradoxical movements. • Subtle or excessive injury to the chest wall and upper abdomen. Also note the shape of the chest. Are there any scars, lesions or deformities?		
Listen	**Listen for:** • Equal air entry. • Observe the chest wall for movement and symmetry • Document any abnormal breath sounds: • Wheeze, crackles, creps etc		
Feel	**Feel for:** • Chest movement – air flow. • Palpate for symmetry, tenderness/fractures. • Trachea position. • Subcutaneous emphysema, which is a crackling sensation on the upper chest wall due to air trapped under the skin from injury or surgery.		
Mastery		**Yes**	**No**
Assessor's Name and Designation:			
Assessor's Signature:			
Comments:			
Date:			

INTERVENTIONS – BREATHING

Clinical Skill	Date Mastery Achieved	Name, designation and signature of Assessor
Appropriate selection of oxygen device and administration		
Bag valve mask		
Accurate SpO_2 measure, wave form and clinical application		
Peak flow		
Spirometry		
Non Invasive Ventilation		

5.3 PRIMARY SURVEY – CIRCULATION

C Circulation Assessment	Assessment Tips	Yes	No
Look	**Look for:** • Colour – pallor, cyanosis, mottling. • External haemorrhage. • Internal haemorrhage – swelling/distension, discolouration under skin.		
Listen	• Apex beat.		
Feel	• Palpate pulses for quality, rate and rhythm, both centrally and peripherally. • Central Capillary refill • Skin temperature, diaphoresis (moisture).		
Mastery		Yes	No
Assessor's Name and Designation:			
Assessor's Signature:			
Comments:			
Date:			

INTERVENTIONS – CIRCULATION

Clinical Skill	Date Mastery Achieved	Name, designation and signature of Assessor
Attach to a cardiac monitor		
Identify life threatening arrhythmias		
Insertion of an intravenous cannula (may vary between facilities)		

5.4 PRIMARY SURVEY – DISABILITY

D Disability (Neurological Assessment)	Assessment Tips	Yes	No
Look	**Look for:** • Level of consciousness; restlessness, AVPU. • Pupil size, equality and reaction to light. • Abnormal posturing, unusual behaviour.		
Listen	• What is your patient complaining of – headache, nausea, vomiting?		
Feel	• Equal limb strength		
Interventions	• Perform a Glasgow Coma Scale • Obtain a BGL		
Mastery		**Yes**	**No**
Assessor's Name and Designation:			
Assessor's Signature:			
Comments:			
Date			

INTERVENTIONS – DISABILITY

Clinical Skill	Date Mastery Achieved	Name, designation and signature of Assessor
Perform Glasgow Coma Scale		
Adult		
Paed		
Obtain a BGL		

5.5 PRIMARY SURVEY – PAIN

Pain	Assessment Tips	Yes	No
Provocation and Precipitating factors	• What were you doing when the pain started? • What makes the pain worse or better?		
Quality	• Description of pain (burning, stabbing, pressure, aching) – No leading questioning		
Radiation/Region	• Location of pain. • Does the pain radiate to another region of the body? • Does the patient have referred pain?		
Severity of pain/Signs and Symptoms	• Pain score • Does the patient have other symptoms? (eg, shortness of breath, diaphoresis, nausea +/- vomiting, tenderness, inflammation, deformity)		
Time/Treatment	• When did the pain start? • Is the pain constant or is it intermittent? • How long has the patient been in pain? • Gradual onset or sudden onset? • What treatment have you received since the onset of pain?		

Mastery	Yes	No
Assessor's Name and Designation:		
Assessor's Signature:		
Comments:		
Date		

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INTERVENTIONS – PAIN

Clinical Skill	Date Mastery Achieved	Name, designation and signature of Assessor
• Select and use an appropriate pain assessment tool		
• Identify and discuss appropriate pharmacological interventions with your facilitator		
• Initiate non pharmacological interventions		
• Initiate appropriate nurse initiated medication (optional – dependent on facility requirements)		

5.6 SECONDARY SURVEY

	Assessment Tips	Yes	No

History	• Accurate assessment of history/mechanism of injury incorporating:
	  - **A** – Allergies
	  - **M** – medications
	  - **P** – past medical and surgical history
	  - **L** – last eat and drank
	  - **E** – Events surround presentation/reason for presenting		

Head/Neck	Performs a comprehensive head to toe examination.
	  - Completes a full GCS distinguishing responses, stimulation methods and documents appropriately
	  - Describes and documents seizure activity
	• **Looks for:**
	  - Asymmetry
	  - Eye movement
	  - Fluid drainage from nose/ears
	  - Ecchymosis under eyes
	• **Feels for:**
	  - C-spine tenderness (trauma)
	  - Facial bone movement
	  - Pain and crepitus (ask patient to clench teeth)
	• **Interventions**
	  - Application of a cervical spine collar/spinal immobilisation
	  - Obtains a full GCS including assessment of limb strength (modified GCS for paediatric)
	  - Appies eye patch/shield when appropriate (foreign body, ocular trauma)
	  - Irrigates eye (when appropriate)		

Chest	• **Looks for:**
	  - Work of breathing
	        ◦ Recession
	        ◦ Tracheal tug
	        ◦ Accessory muscle use
	        ◦ Posture
	  - Observe the chest wall for movement and symmetry
	• **Listens for:**
	  - Ability to speak in words, phrases
	  - Auscultates the chest
	• **Feels for:**
	  - Chest wall integrity (subcutaneous emphysema)
	  - Central cap refill
	• **Interventions**
	  - Documents respiratory rate and pattern
	  - 12 lead ECG		

Table continued next page

5.6 Secondary Survey (Cont'd)

	Assessment Tips	Yes	No

Abdomen	**• Looks for:**
	- Inspect the abdominal contour at the patient's level for
	    ◦ Size
	    ◦ Shape
	    ◦ Symmetry
	    ◦ Masses or bulges
	    ◦ Colour, ecchymosis
	• Listen for:
	- Auscultate bowel sounds
	    ◦ RLQ (ileocaecal junction)
	    ◦ All four quadrants
	• Feel for:
	- First palpate areas where you don't expect problems
	    ◦ Initial gentle palpation
	    ◦ More firm palpation
	- Palpate liver, spleen, kidneys
	- Note organomegaly
	- Discuss abnormal signs & implications
	• Interventions:
	- Performs an accurate urine analysis (including urine BHCG –
	  may vary between facilities)
	- Inserts indwelling catheter (when required/orders – may vary
	  between facilities)
	- Insert nasogastric tube (when required/ordered – may vary
	  between facilities)		

Limbs	**• Looks for:** - Deformity - Swelling, redness, bruising etc. - Laceration, contusions, abrasions etc. **• Feel for:** - Tenderness - Pulses, capillary refill - Subcutaneous emphysema - Temperature **• Interventions:** - Discuss the relevance of the 5 P's (Pallor, Pain, Parenthesis, Pulses and Paralysis) - Understands the principles of R.I.C.E - Able to apply the appropriate slings/splints - Measure for crutches and educate patient regarding use		
Mastery		**Yes**	**No**
Assessor's Name and Designation:			
Assessor's Signature:			
Date:			
Comments:			

5.7 TRAUMA

Trauma	Assessment Tips	Yes	No
Airway	• Assess Airway patency • Identify causes of obstruction within a trauma setting (facial fractures, burns, altered LOC) • Secure c-spine		

Breathing	• Assess Breathing and apply oxygen
	• Identify life threatening thoracic injuries (tension pneumothorax,
	  haemothorax, flial chest, penetrating wounds, tamponade,
	  sucking chest wound) and discuss interventions		

Circulation	• Assess circulation
	• Identify areas of haemorrhage (external, head, chest, abdomen,
	  pelvis, long bones) and discuss potential intervention to stop the
	  bleeding
	• Identify types of shock and discuss fluid replacement		

Disability	• Assess Neurological status (AVPU, pupils, GCS, limb strength) • Pain score		

Secondary Survey (as above)	• Expose the patient and maintain thermal control
	• Full set of vitals – assess RR, SpO_2, HR, BP, temp, GCS and pupils,
	  $ETCO_2$ (if ETT) – maintain regular monitoring
	• Gadgets – ECG/Cardiac monitoring, IDC, NG/OG, BGL – Discuss
	  indications and contraindications for each
	• Head to Toe
	• Inspect the back
	• Jot it down – systematic documentation		

Mastery		**Yes**	**No**
Assessor's Name and Designation:			
Assessor's Signature:			
Comments:			
Date:			

INTERVENTIONS – TRAUMA

Clinical Skill	Date Mastery Achieved	Name, designation and signature of Assessor
Measuring and applying of c-spine collar		
C-spine immobilisation		
Log roll		
Splinting (eg. Pelvis splint, fractured mid shaft femur, limb #)		
Reassess ABCD post intervention		
Prepare for transport (internal/external		
Assisting with chest tube insertion/decompression *(optional – dependent on facility requirements)*		

5.8 PAEDIATRICS

Paeds	Assessment Tips	Yes	No
Airway	• Assess Airway • Identify anatomical differences • Identify **RED FLAGS** for a compromised airway • Measuring and insertion of oropharygneal airway • Suctioning • Assisting in intubation and securing ETT (optional – based on facility requirements)		
Breathing	• Assess Breathing including RR, Work of breathing and SpO_2 • Identify the anatomical and physiological differences between children and adults • Identify **RED FLAGS** for deterioration of respiratory function • Indication for oxygen administration • Demonstrate the use of a spacer • Explain and complete a Peak flow • Demonstrate use of a Bag valve mask (optional – dependent on facility requirements)		
Circulation	• Assess circulation including pulse rate, capillary refill, and blood pressure. Discuss when cardiac monitoring is required • Identify the anatomical and physiological differences between children and adults • Identify signs of dehydration and initiate nursing intervention (trial of fluids etc) • Identify **RED FLAGS** for deterioration of circulatory status • Indication for nasogastric tube insertion • Indication for Intranvenous cannula insertion • Securing paediatric IVC (according to local policy) • Indication for the use of Easi IO/intraoesseous (optional – dependent on facility requirements)		
Disability	• Assess Neurological status (AVPU, pupils, modified paediatric GCS) • Identify **RED FLAGS** for deterioration of neurological function • Pain score – utilise an appropriate pain assessment tool based on the child's age and situational factors • Discuss analgesia options based on clinical presentation • BGL completed when clinically indicated – discuss the rational for completing BGL on children		
Mastery		Yes	No
Assessor's Name and Designation:			
Assessor's Signature:			
Comments:			
Date:			

INTERVENTIONS – PAEDIATRICS

Clinical Skill	Date Mastery Achieved	Name, designation and signature of Assessor
Demonstrate age appropriate distraction therapy		
Demonstrate appropriate continued monitoring of the paediatric patient including regular RR, WOB, SpO$_2$, HR, Temp, alertness, GCS +/- BP		
Assist in application of a POP		
Nasopharyngeal aspirates		
Assist in a lumbar puncture		
Assist in the insertion of an IVC		
Assist in wound closure		
Safely discharge a paediatric patient		
Paediatric Nitrous oxide (optional – dependent on facility requirements		
Discuss indication for referral for Community Services		

5.9 MENTAL HEALTH

Mental Health	Assessment Tips	Yes	No
	• Performs a physical assessment on a psychiatric patient		
	• Performs a mental health examination on a psychiatric patient		
	• Manages the aggressive patient using de-escalation techniques		
	• Performs a brief risk assessment		
	• Performs a brief suicidal assessment		
	• Outlines the nurses responsibility in the mental health act		
	• Identifies the legal implications of a Section 24, Schedule 22 and Form 1		
	• Formulates a correct history of drug and alcohol usage		
Mastery		**Yes**	**No**
Assessor's Name and Designation:			
Assessor's Signature:			
Date:			
Comments:			

5.10 PROFESSIONALISM

	Assessment Tips	Yes	No
Continuum of care	• Provides high quality patient care • Recognises own abilities and level of professional competence • Provides safe care and support to patients and their significant others • Acts to enhance the dignity and integrity of individuals and groups		
Leadership and Management	• Demonstrates a professional attitude (punctuality, sick leave) • Provides educational support for colleagues • Complies with Unit, Hospital and Area code of Conduct • Applies the principles of best practice techniques to patient care		
Human resource Management	• Maintenance of professional standards • Promotes a team environment within the Unit • Demonstrates awareness of staff support services and articulates how they may be utilised by self and others		
Information management	• Demonstrates effective communication skills at all levels within the organisation • Demonstrates de escalation techniques • Demonstrates reflective practices regarding our communication styles and behaviours within stressful situations • Respect and maintain confidentiality of patient information		
Safe Practice and the environment	• Recognises and responds appropriately to critical incidents, accidents and errors • Demonstrates a satisfactory knowledge base for safe practice • Demonstrates critical thinking and problem solving techniques • Maintains a physical and psychological environment which promotes safety, security and optimal health • Demonstrates accountability for own nursing practice		
Mastery		Yes	No
Assessor's Name and Designation:			
Assessor's Signature:			
Date:			
Comments:			

5.11 ADDITIONAL CLINICAL SKILLS

In this section you can note any additional clinical skills mastered that are not covered in the preceding section.

Clinical Skill	Date Mastery Achieved	Assessor's Name, Designation and Signature

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NOTES